



**1ST SUB SAHARAN
REGIONAL FORUM**
27TH - 28TH AUGUST 2015
NAIROBI, KENYA

www.iaom-mea.com



IAOM MEA Region Director Message

Welcome to the 1st IAOM MEA Regional Forum happening on 27-28 August 2015 in Safari Park Hotel Nairobi, Kenya!

As part of its educational outreach initiative, IAOM MEA (International Association of Operative Millers Mideast & Africa) is organizing annual regional forums throughout Sub-Saharan Africa, Maghreb, and the Middle East.

The core objective is to reach millers in these mostly developing countries and provide intensive technical training and education. These forums are designed to be purely technical addressing milling trends, technology, and challenges unique to the region.

IAOM MEA is more committed than ever to its renewed mission to deliver continuing education and training for professionals in the grain milling industries especially in far flung developing countries. This would not be possible without our generous sponsors Buhler, US Wheat Associates Inc, Muehlenchemie, Eurogerm, Engrain US, FRAME, Said Salim Bakhresa & Co., Mirpain, Brabender, Sefar, Alapala and IMAS that share the same ideals of advancing technology in the flour milling, cereal grain and seed processing industries.

On behalf of IAOM MEA, I would like to thank all delegates and valued sponsors for making the 1st IAOM MEA Regional Forum possible. I wish you all enjoy and benefit from this premier knowledge-sharing exercise.

Sincerely,

Ali Habaj

IAOM MEA Region Director





Vision

The International Association of Operative Millers Middle East and Africa Region (IAOM MEA) has developed the Regional Forums program which covers the Sub Saharan African region, the Maghreb region and the Middle East region. Every year the IAOM MEA regional forum will rotate in MEA and target technical millers providing them with a professional and business platform customized to answer their local matters.

The 1st IAOM MEA Regional Forum 2015 will cover the Sub Saharan region and will take place in August 27th-28th in Nairobi, Kenya at the Safari Park Hotel.

Mission

The IAOM MEA Regional forums will make local millers benefit from top quality papers dealing exclusively with technical and regional challenges. A networking space will also be available to discover the latest technologies and solutions provided by international suppliers.

Who should attend?

The IAOM MEA Regional Forums are open to:

- Technical Staff
- Head Millers
- Production Managers
- Machinery Suppliers
- Laboratory equipment suppliers

Registration Terms & Conditions:

Registration Fees

Mills	\$200
Suppliers (in addition to sponsorship package)	\$450

Terms & Conditions:

- Registration fees include coffee breaks, lunch for 2 days and networking dinner sponsored by Buhler on 28th of August 2015.
- No refunds after registration with payment. Change of participant is possible.



FORUM PROGRAM





The 1st Sub Saharan Regional Forum will be held at the Safari Park Hotel & Casino, Nairobi, Kenya

TIME	FORUM DAY 1 - THURSDAY AUGUST 27TH	SPEAKERS
08:00 - 09:00	Collection of badges and welcome coffee @ Ivory Lounge entrance	
09:00 - 09:05	Opening Speech IAOM MEA presentation	Mr. Peter Muni 1st Sub Saharan Regional Forum Chairman
09:05 - 09:10	Regional forums vision & mission	Mr. Peter Lloyd IAOM MEA Education Committee Chairman
09:10 - 12:55 MAIZE PROCESSING		
09:10 - 09:30	How to meet food grade limit of Aflatoxin contamination	Ms. Florence G. Kiburi, Assistant Lecturer, Jomo Kenyatta University of Agriculture and Technology (Kenya)
09:30 - 09:40	Questions and answers	
09:40 - 10:00	Ultimate technology to reduce the Aflatoxin level in maize	Mr. Charles Wanjau Senior Technologist, Buhler East Africa (Kenya)
10:00 - 10:10	Questions and answers	
10:10 - 10:55	Coffee break and networking @ Ivory Lounge Terrace	
10:55 - 11:15	Maize Milling - Modular Maize Mill	Mr. Milan Shah Technical Director - Alapala Machine & Trade Inc. (Turkey)
11:15 - 11:25	Questions and answers	
11:25 - 11:45	Instant maize meal and Cereal based porridge	Mr. Stefan Lutz Head of Technology, Buhler East Africa and Teacher of AMS (Kenya)
11:45 - 11:55	Questions and answers	
11:55 - 12:55	Lunch break @ Kigwa cafe	
12:55 - 16:10 QUALITY CONTROL		
12:55 - 13:15	Using the Solvent Capacity Retention (SRC) Test to determine flour functionality	Mr. Peter Lloyd Regional Technical Director, US Wheat Associates Inc. (Morocco)
13:15 - 13:25	Questions and answers	
13:25 - 13:45	Technologies and methods to control grain and flour quality	Mr. Edouard Navarre, Export Director, Africa, Middle East and Asia Regions, Eurogerm (France)



TIME	FORUM DAY 1 - THURSDAY AUGUST 27TH	SPEAKERS
13:45 - 13:55	Questions and answers	
13:55 - 14:15	Micro-Ingredients action on enhancing flour quality	Ms. Pinar Erdal Research and Development Manager, Mirpain Bakery & Milling Ingredients Co. (Turkey)
14:15 - 14:25	Questions and answers	
14:25 - 15:10	Coffee break and networking @ Ivory Lounge Terrace	
15:10 - 15:30	Control of wheat flour quality by improvers	Dr. Lutz Popper Head R&D, Mühlenchemie (Germany)
15:30 - 15:40	Questions and answers	
15:40 - 16:00	Brabender 3-Phase System: Farinograph - Extensograph - Amylograph	Mr. Norbert Schurna Technical Sales Engineer, Brabender (Germany)
16:00 - 16:10	Questions and answers	



The 1st Sub Saharan Regional Forum will be held at the Safari Park Hotel & Casino, Nairobi, Kenya

TIME	FORUM DAY 2 - FRIDAY AUGUST 28TH	SPEAKERS
08:00 - 09:00	Welcome coffee @ Ivory Lounge entrance	
09:00 - 11:15 MULTI GRAIN PROCESSING		
09:00 - 09:20	New market opportunity for processing local grain into traditional food	Mr. Peter Striegl Head of Grain Milling, Bühler AG (Switzerland)
09:20 - 09:30	Questions and answers	
09:30 - 09:50	Experimental Milling to Evaluate Tempering Aids for Commercial Milling Applications	Dr. Chris Miller, Ph.D. Senior Director of Research Innovation and Quality, Engrain US (USA)
09:50 - 10:00	Questions and answers	
10:00 - 10:20	Overall considerations/benefits of metallic silos	Mr. Francesco Selva Chief Design Engineer, Technical Department, FRAME srl (Italy)
10:20 - 10:30	Questions and answers	
10:30 - 11:15	Coffee break and networking @ Ivory Lounge Terrace	
11:15 - 13:45 EDUCATION AND TRAINING		
11:15 - 11:35	The road from trainee Miller to Project Manager	Mr. Peter Muni General Manager- New Projects Said Salim Bakhresa & Co. Ltd. (Tanzania)
11:35 - 11:45	Question and answers	
11:45 - 12:05	Qualified Staff - Ultimate Plant performances	Mr. Martin Schlauri Director of Buhler African School of Milling (Kenya)
12:05 - 12:15	Question and answers	
12:15 - 12:35	Stretching systems	Mr. Laurent Brehm Manager for African Countries. Sefar (Switzerland)
12:35 - 12:45	Question and answers	
12:45 - 13:45	Lunch break @ Kigwa caffe	
13:45 - 17:00 VISIT OF THE AFRICAN SCHOOL OF MILLING & CERTIFICATE OF ATTENDANCE DISTRIBUTION		
14:00 - 14:15	Transfer from Safari Park Hotel to African School of Milling Meeting point Hotel lobby at 15:00	
14:15 - 15:30	Welcome drinks & Networking Sponsored by Buhler	
15:30 - 16:30	African Milling School Tour	
16:30 - 18:00	BBQ and networking Sponsored by Buhler @ African School of Milling	
17:00 DISTRIBUTION OF NOMINATIVE CERTIFICATES OF ATTENDANCE OF THE 1ST SUB SAHARAN REGIONAL FORUM 2015		
17:00 - 17:15	Departure from ASM to Safari Park Hotel	



SPEAKER LINEUP





Ms. Florence G. Kiburi

Assistant Lecturer, Jomo Kenyatta University of Agriculture & Technology (Kenya)

Biography: Ms. Florence G. Kiburi is an Assistant Lecturer, Department of Biomechanical and Environmental Engineering, Jomo Kenyatta University of Agriculture and Technology. She holds an MSc in Agricultural Processing Engineering–JKUAT, Kenya, BSc in Agricultural Engineering–JKUAT, Kenya and BSc in Biomechanical and Processing Engineering–JKUAT, Kenya. She is registered as a graduate engineer with the Engineers Board of Kenya. Her areas of specialization includes: postharvest technology of biological

materials, processing of agricultural materials, farm machinery, agricultural structures and renewable energies.

Presentation Title: How to meet food grade limit of Aflatoxin contamination

Abstract: The contamination of maize by Aflatoxins is of major concern due its impact on health, trade and agriculture. This presentation seeks to increase awareness among key players in the industry about the Aflatoxin menace in agricultural products mainly maize. In addition, this work seeks to provide vital information for policy formulation aimed at meeting food grade limit of Aflatoxin contamination in the processing industries. The strategies herein discussed aim at retaining the nutritive value and palatability of food or feed material, without changing the physical properties of raw material and remaining cost efficient. Among the technologies discussed is the use of SAPs as a potential drying material for maize and other agricultural products.

Company Profile: Jomo Kenyatta University of Agriculture and Technology (JKUAT) situated at Juja, 36 kilometres from Nairobi on Thika Superhighway, offers academic programmes in a variety of disciplines: Agriculture, Engineering, Enterprise Development, Law, Built Environment, Health Sciences, and Applied Sciences. The University has a pool of qualified academic and technical staff who undertakes applied research for national development.



**Mr. Charles Wanjau**

Senior Technologist, Buhler East Africa (Kenya)

Biography: Charles Wanjau is a Senior Technologist based at Buhler in Nairobi with experience in the milling industry for many years. He has held different positions from a Shift Miller, Maintenance Superintendent, Head Miller, Mill Manager and Production Manager. He also worked as a consultant before joining Buhler in 2010.

Presentation Title: Ultimate technology to reduce the Aflatoxin level in maize

Abstract: To produce clean and safe end products is the ultimate goal of every miller. The raw material, especially maize, is often contaminated by fungi and diseases when it arrives at the mills. If the level of fungi, in particular Aflatoxin, remains within the food legislations, the material has to be decontaminated thoroughly. Infested kernels must be rigorously separated by sieving, aspiration and sorting, using high-tech optical sorting solutions. A specially designed scourer with adjacent aspirator takes care of sound kernels that are contaminated on the surface. The clean maize then undergoes conditioning and tempering. With an efficient degermination and selective grinding, the best separation of germ, bran and endosperm is achieved. In conclusion, to meet top quality and food safety requirements, latest technology and state-of-the-art equipment must be applied.

Company profile: Every day, billions of people come into contact with Bühler technologies to cover their basic needs for foods, mobility, or communication. With our industrial process technologies and solutions, we contribute significantly to feeding the world's population, setting the focus on food security and safety. Bühler flour mills process around 65 percent of the wheat harvested worldwide into flour. Its contribution to processing rice and producing pasta, chocolate, or breakfast cereals is similarly important. Moreover, Bühler is a leading solution provider of die casting, wet grinding, and surface coating technologies, with an emphasis on automotive, optics, electronics, printing & packaging inks, and glass applications. The family-owned company Bühler is proud of its Swiss roots and feels particularly committed to sustainability.





Mr. Milan Shah

Technical Director, Alapala Machine & Trade Inc. (Turkey)

Biography: Mr. Milan Shah joined Alapala in 2008. After having worked for Sangati Berga Spa for over 16 years, Milan Shah obtained his degree in Mechanical Engineering from the University of Bristol, England. Current activities are; R&D and Technical affairs in Istanbul Office.

Presentation Title: Maize Milling – Modular Maize Mill

Abstract: Ugali, Meali meal, Sifted maize and Pap are all similar product from Maize, which is the staple food for Sub Saharan Africa. The modular Maize mill concept for the African continent has been developed. For a new plant, conventional mill building can represent a large proportion of the overall investment and slow to construct. In contrast, a modular plant is self-supporting and requires only a simple slab for mounting. A light shed-like structure is required to provide protection for the equipment. The modules for cleaning, degerming and milling can be supplied as full set for a new plant or individually for upgrading of an existing mill. The installation of the plant is simplified and can be assembled in a relative short period of time. The modular maize mill includes all handling equipment, electrical MCC panel with touch screen PLC control system.

Company Profile: Founded in 1954, Alapala is a global provider of flourmills, maize mills, rice mills, feed mills, silos and storage systems, and steel fabricated mill buildings. Alapala builds turnkey plants of any desired capacity and is a one of the top exporters in Turkey, exporting 95% of its production. It has a considerable number of turnkey references in over 85 countries in all the four continents.





Mr. Stefan Lutz

Head of Technology,
Bühler East Africa and Teacher of African Milling School (Kenya)

Biography: The food technologist Stefan Lutz has profound experience in the grain industry with focus on the African market. He joined Bühler AG, Uzwil, Switzerland in 2007. After several assignments to commission mills around the world, Stefan relocated in 2010 to South Africa as a Head Miller for Sub-Saharan Africa. Stefan is now based in Nairobi, as Head of Technology East Africa and acts as a Technical Instructor at the African Milling School.

Presentation Title: Adding value to maize products – Instant maize meal and Cereal based porridge

Abstract: How to combine traditional staple food with the demand for convenience food? Maize meal, known as Mealie Pap or Ugali, is the most beloved staple in Sub Saharan Africa, traditionally freshly prepared with a cooking time of around 25 to 35 minutes. Bühler has developed a process to produce Instant Maize Meal, where taste, texture and flavor are kept the same, but with a cooking time of just 2 to 5 minutes. Also processing local grains and by-products from maize to a highly nutritious and tasty porridge is well-known in the local diet. To produce such food industrially and turn a cereal-based blend into a tasty and “ready-to-eat” porridge is a novelty. Variations with maize, sorghum, millet soya and also flavoured and fortified varieties are available on the market. It’s all about matching traditions in food processing with the latest technology solutions.

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Mr. Peter Lloyd

Regional Technical Director,
US Wheat Associates Inc. (Morocco)

Biography: Peter is a miller with a broad experience in wheat marketing, mill engineering, quality control, research and development and vocational training of operative millers. He joined USW in 1991 and has worked around the world for this organization conducting training activities and seminars around the world.

Presentation Title: Using the Solvent Capacity Retention (SRC) Test to determine flour functionality

Abstract: Peter Lloyd will introduce the SRC method at the first regional IAOM-MEA Sub Saharan Africa forum in Nairobi. Developed by the Nabisco Corp. (now Mondelez) in the 1980's, SRC presents a rapid, inexpensive method to determine finished product functionality in soft wheat products (cakes, cookies, crackers, mandazi, donuts etc.) using four commonly available solvents, each highly correlated to the ability of a dough system to absorb water during mixing, and to give up water during the baking process.

Additionally, recent developments of the test in South Asia have shown the suitability of this analysis to bread wheat functionality also. Lloyd will present some of the current testing results from South Asia, in addition to the use of additional hard wheat - specific solvents specifically aimed at hard wheat (bread) products. SRC currently represents the most highly correlated laboratory results to baked product quality of all analyses, and is furthermore one of the most inexpensive analyses to equip and run in the laboratory.

Company Profile: U.S. Wheat Associates is the industry's export market development organization working in more than 100 countries on behalf of America's wheat producers. Funding is made possible through checkoff dollars, goods and services from 19 state wheat commissions and cost-share grants from the USDA's Foreign Agricultural Service. USW does not buy, sell nor process wheat; we do help make it easier for everyone else who does. USW proudly represents the hard-working farm families that produce enough wheat every year to fill American tables, while still supplying a leading share of world wheat trade.

USW works to help wheat buyers, millers, bakers, wheat food processors, and government officials understand the quality, value, and reliability of all six classes of U.S. wheat. Our Mission is to "Develop, maintain, and expand international markets to enhance the profitability of U.S. wheat producers and their customers."





Mr. Edouard Navarre

Export Director,
Africa, Middle East and Asia Regions, Eurogerm (France)

Biography: Edouard Navarre has 25 years' experience in the Milling & Bakery business. He first joined the biggest Milling group in France "Grands Moulins de Paris" to develop the sales of French flour and bakery mixes in the UK market then he moved to the Frozen bakery division of G.M.P to take in charge the sales development of "Délifrance" in Southern Europe (Spain /Portugal and Greece). He was then Managing Director of "Délifrance Iberica". Actually Eurogerm's Export Director in charge of Africa, Middle East and Asia.

Presentation Title: Technologies and methods to control grain and flour quality

Abstract: Importation of wheat is one of the main issues for the African Millers. In order to supply their customers with quality flour and more specifically with consistency, they need to have a deep understanding of the raw materials they use. Wheat quality will depend first of all on an appropriate sourcing which begins on the origin and on the lot they will buy at the best price! But, of course, nobody can be discarded from quality surprises! The specific method that will be described will help you to build and monitor grain and flour quality through different breadmaking tests and physical analysis to build and optimize a wheat blending model. Then to define your objectives in term of flour quality and finally to design a suitable corrector which will add on one hand consistency to your quality and will optimize on the other hand your wheat blends to get the best value for money. Depending on your application, breadmaking process and quality standards of the market, some criteria will be more relevant than others. This method will highlight the criteria to select according to the type of bread and will help you to analyse and read the results accordingly!

Company Profile: Eurogerm is specialized in research, development, blending and marketing for the wheat-flour-bread-morning goods sector:

- Flour correctors: flour quality
- Bread improvers: softness, crustiness, texture, flavour
- Premix specialty breads/morning goods: bread with cereals, seeds, taste, colour

Technological and customising ingredients: gluten, enzymes, roasted cereals flours, wheat germs, fibres, vitamins. Most of EUROGERM products are custom made, tested in our baking centre. A sensory evaluation centre offers practical tools for improvement of taste, flavour, visual aspect and nutritional capacities of your final products. Eurogerm proposes on-site technical assistance in order to help its customers in achieving their developments.





Ms. Pinar Erdal

Research and Development Manager,
Mirpain Bakery & Milling Ingredients Co. (Turkey)

Biography: I was born on 06.01.1985 in Istanbul. I graduated from “Food Technology” on 2008. Now, I am studying “Food Engineering” also. I am working at Mirpain Bakery & Milling Ingredients company since January 2010 as “Research and Development Manager”.

Presentation Title: Micro-Ingredients action on enhancing flour quality

Abstract: The ingredients for flour improving, especially ultra concentrated enzymes catalyse biochemical reaction. As they are ultra concentrated, they are used at very low dosage (ppm) and yield big desired effects on the flour quality for example, they enhance gas production by yeasts and can help control the strength of the dough. The enzymes such as; alpha amylase, hemicellulase, glucose oxidase, lipase, etc are used to improve flour quality. But the contents and actions change according to the flour type for example, for biscuit flour you need a different kind enzyme. The enzymes have various effects on dough for example; glucose oxidase has an oxidative effect. The extensibility of the dough is increased by hemicellulase.

Company Profile: Mirpain is a worldwide known Turkish company with quality bakery ingredients produced with latest technology. We serve our healthy – practical – highperforming – tasty ingredients in 45 countries through the reputable local partners. Our bakery solutions are preferred by thousands of bakery chefs with highest quality and reasonable prices. Our product line consists of concentrated baking enzymes, instant dry yeasts, flour correctors, bread improvers and pastry products. We produce tailor-made ingredients so that we can meet all specific demands of our customers. We are continuously improving our milling and baking solutions at our laboratories and research centers. That’s why we offer non-GMO, environment friendly products, hygienic and natural, trendy and conventional, sophisticated but functional, new choices and new concepts. Mirpain users are supported with perfect ingredients, know-how, merchandising and introductory materials. To reach the optimum advantage, Mirpain experts are waiting for you to serve the correct solution.





Dr. Lutz Popper

Head R & D, Muelenchemie (Germany)

Biography: Lutz Popper read food technology at the Berlin University of Technology, followed by a Ph.D. thesis in Biotechnology. Since 1993 Popper is with Mühlenchemie, as Head of Research & Development and Scientific Director. He lectures at the Kiel University of Technology since 1997 and has contributed more than 140 articles and lectures to the field of food science.

Presentation Title: Control of wheat flour quality by improvers

Abstract: The quality of flour is subject to fluctuation due to variable properties of the wheat itself. When the miller has exhausted all his grist formulation and milling options to standardize the flour quality, additions come into the game. This paper provides a quick overview on the properties and functions of common flour improvers, in particular ascorbic acid and enzymes (amylases, xylanases, lipases, oxidases). Examples will be given on the rheological effects and the impact on the baking behavior. Furthermore, potential synergies of the improvers will be discussed. A brief outlook on the potential of flour improvers to optimize the grist costs for pastas flour and the end product quality will finalize the presentation.

Company Profile: Mühlenchemie is one of the world's best-known companies in the flour treatment industry. Its core competence is customized solutions for standardizing, improving and fortifying flour. At the Technology Centre in Ahrensburg a team of research scientists and applications technologists works on innovations for the future. With its recently enhanced laboratories and pilot plants for milling, baking and pasta production, the company develops and produces enzyme systems, flour maturing and oxidizing agents, bromate replacers, emulsifiers, vitamin and mineral premixes and functional systems for ready-mixed and compositev flours. Products include our new Pastazym Plus, which enhance the quality of pasta.





Mr. Norbert Schurna

Technical Sales Engineer, Brabender (Germany)

Biography: After my formal education and training as a baker, I immediately worked in several bakeries then qualified as a Baker Technologist. I then worked for about 15 years in the lab of a flour mill before joining Brabender. I initially worked as a specialist for NIR/NIT products. In 2012, I took over as Technical Sales Engineer in charge of sales for lab equipment, especially rheology, moisture, milling, and viscosity.

Presentation Title: Brabender 3-Phase-System: Farinograph - Extensograph – Amylograph

Abstract: The Brabender 3-Phase-System, where quality is measured! Grain as a natural product demands a high and constant degree of quality control. However, mostly the material cannot be divided into good or bad flour. There are merely wrong applications for the wrong flour! The Brabender 3-Phase-System gives you the tool to identify the right raw material for the desired process. In step number one, the Brabender Farinograph measures the water absorption of the flour and identifies the kneading characteristics of the dough. The Brabender Extensograph gives information about the stretching behaviour of the dough and the flour's baking characteristics. Finally, the Brabender Amylograph measures the enzyme activity of the alpha amylase and thus the gelatinization characteristics of the flour are obtained. The presentation outlines the importance of quality control by practical examples. Hereby the focus lies on the data obtained from the 3-Phase-System and how to interpret the results in order to classify the flour and to select the right application.

Company profile: Founded in 1923, Brabender belongs to the leading manufacturers of instruments and systems for testing physical properties. We are active in all fields of research, development and industrial production in the food and chemical industries all over the world. Our product range includes devices for the determination of rheological properties, laboratory mills for sample preparation, an automatised drying oven for moisture determination, laboratory scale extruders for product development as well as Near-InfraRed-Spectrometers for rapid analysis of grains, flours and oil seeds. A modern application laboratory is at the disposal of all customers and interested parties for trials with their own material. All measuring systems of Brabender can be tested under practice-oriented conditions. Today the Brabender group comprises four companies, each of which is responsible for its special range of development, production and service. This allows versatility in each of the special lines – to the benefit of our customers.



**Mr. Peter Striegl**

Head of Business Unit Industrial Milling, Bühler AG (Switzerland)

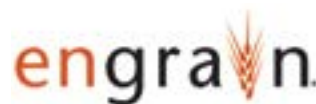
Biography: Mr. Peter Striegl joined Bühler in 1998 after graduating as a milling technologist. After completing assignments in plant commissioning, he was made responsible for the milling technology in Northern Europe. Back to the headquarter in Switzerland, Peter Striegl was heading the technology department of the grain milling in Switzerland. From 2012 to 2014 he was responsible for the milling technology worldwide. Since 2014 Peter Striegl is the Head of Business Unit Industrial Milling, Uzwil, Switzerland.

Presentation Title: New market opportunity for processing local grain into traditional food

Abstract: The trend towards traditional food as well as restrictions in some countries in trading grains increases the demand for locally cultivated grains. Consumers ask for high product quality and convenience, which is an opportunity for innovative millers to industrially process local grains into tasty, healthy and safe consumer products. Bühler offers an innovative solution to industrially process various grains, such as maize, sorghum, millet, soya and teff in one milling line. Consistent finished product quality, highest sanitation and process efficiency can be achieved. Investment costs are low because different grains can be processed using the same machines. A great possibility to be one step ahead in the marketplace in processing local multi-grains into traditional food.

Company profile: Every day, billions of people come into contact with Bühler technologies to cover their basic needs for foods, mobility, or communication. With our industrial process technologies and solutions, we contribute significantly to feeding the world's population, setting the focus on food security and safety. Bühler flour mills process around 65 percent of the wheat harvested worldwide into flour. Its contribution to processing rice and producing pasta, chocolate, or breakfast cereals is similarly important. Moreover, Bühler is a leading solution provider of die casting, wet grinding, and surface coating technologies, with an emphasis on automotive, optics, electronics, printing & packaging inks, and glass applications. The family-owned company Bühler is proud of its Swiss roots and feels particularly committed to sustainability.





Dr. Chris Miller, Ph.D.

Senior Director of Research Innovation and Quality,
Engrain US (USA)

Biography: Dr. Chris Miller is the Senior Director of Research Innovation and Quality at Engrain and Director of the Engrain Innovation Lab. The Innovation Lab has a core focus on cereal enzyme and protein biochemistry with applications for the milling and baking industry.

Presentation title: Experimental Milling to Evaluate Tempering Aids for Commercial Milling Applications

Abstract: Recent advances in flour milling technology have brought our industry near the possible limits of extraction from the wheat we mill. In order to make added gains in extraction and finished product quality we see the tempering system as an area where innovation would bring new value to the business of flour milling. In this talk Dr. Chris Miller will describe a system developed at the Engrain Innovation Lab to evaluate tempering treatments and their effects on milling efficiency and finished product quality. Using our proprietary tempering aid we have observed changes in product distribution in the mill, improved flour quality and added value to byproducts.

Company Profile: Engrain provides innovative products to the milling and baking industries all over the world that improve bread volume, optimize texture and enrich flour and baked goods. Engrain offers some of the most advanced products in the marketplace. Engrain provides a full portfolio of performance, nutrition and appearance products for milling, baking and food processing applications, including volMAX™, hydroSOFT™ and fortiMAX™. At Engrain, the philosophy is simple: bringing the latest advances in technology to help customers save money and increase their profits.





Mr. Francesco Selva

Chief Design Engineer, Technical Department,
FRAME srl (Italy)

Biography: Francesco Selva is Chief Design Engineer in FRAME's Technical Department. He is responsible of project planning and management, silo design and in-house technical software developments. He has a solid background in structural engineering thanks to a Master Degree in Structural Engineering achieved in 2012 at University of Bologna. He had also experienced abroad, at UCSD University of California – San Diego.

Presentation Title: Overall considerations/benefits of metallic silos

Abstract: Metallic silos are probably the most common shell structures designated to the storage of large quantities of free flowing cereals, ranging from small 'on-farm' silos designed for the agricultural market, up to large scale industrial/commercial storage silos that are suited to a large number of different applications. The key design factor is usually the definition of the silo capacity which is based on the planned application of the silo. Thanks to the simple basic design, manufacture and erection principles, metallic silos are standardized, with the result that cost-effective structures can be realized in a relatively short timescale. Furthermore, the basic material used in the construction, that is high quality galvanized steel, allows the structures to be relatively light, with the results that there are realistic transportation costs to site as well as a low-maintenance requirement. The aim of this paper is to focus the attention on the overall benefits of metallic silos; made possible thanks to FRAME's experience gained in its 25 years of in-field activity.

Company profile: FRAME is one of Europe's largest manufacturers of corrugated steel storage silos. The FP flat bottom range of silos is available up to 20,000 tonnes. All FRAME silos can be manufactured to the latest Eurocode standard even if ASAE & DIN designs can also be supplied upon request. A full range of accessories, including aeration & temperature sensing systems together with catwalks, access ladders & platforms as well as sweep augers are produced in the modern FRAME manufacturing facilities in Italy. The FRAME range of silos is suited to both the Agricultural & Commercial markets, & FRAME has recently supplied silos to a number of countries in Europe as well in Middle East and Africa. The photo below shows the first 24,000 tonnes phase of a total of a planned 50,000 tonnes storage facility in Tanzania recently delivered by FRAME.





Mr. Peter Muni

General Manager, New Projects, Said Salim Bakhresa & Co. Ltd (Tanzania)

Biography: I started my career as a trainee miller and I progressively trained with institutions, machinery manufacturers, and eventually attended and graduated from Kansas State University. I started working as a shift miller and assumed I increased responsibilities. I am currently working as General Manager New Projects. I have had the opportunity to work in wheat, maize, and pulses process units. My pleasure is in sharing knowledge and learning from one another.

Presentation Title: The road from trainee Miller to Project Manager

Abstract: Learning is a lifelong activity with the material to be learned changing with age, circumstances, internal and external environment, employer, and customer requirements. Quoting the African saying, “If you want to go quickly, go alone, if you want to go far, go with others.” (Anonymous) My journey started 40 years ago, and I have not yet reached the destination. Fortunately, I am traveling with others as I continue to learn. Let’s take a rewind of the journey.

Company Profile: The visionary industrialist, Mr. Said Salim Awadh Bakhresa, Chairman of the Said Salim Bakhresa and Company Limited, began his journey towards building his vast business empire in 1975. He started by opening a modest restaurant, formally named “Azam”, and made it a profitable venture. Today, the Group is one of Tanzania’s largest conglomerates with a turnover of over \$800 million. The brand, AZAM has become synonymous with the Group. It is a symbol of quality, reliability and affordability in Tanzania. In the era of globalization, the Group has achieved recognition at the Pan African level, with a presence in East, Central and Southern Africa.



**Mr. Martin Schlauri**

Managing Director, African Milling School (Kenya)

Biography: Mr. Martin Schlauri joined Bühler in 1980 after graduating as a milling technologist. After completing assignments in process development and plant commissioning, he was made responsible for the flour milling business in various countries. Back to the headquarter in Switzerland, Martin Schlauri took over the management of the grain milling training centre and later on heading Bühler's worldwide grain milling activities. Since 2015 Martin Schlauri is the Managing Director and teacher at the African Milling School in Nairobi, Kenya.

Presentation Title: Qualified staff – Ultimate plant performance

Abstract: As the demand for flour increases in the African continent and new mills are set up, the need for qualified personnel increases too. The African Milling School offers young employees from industrial mills a comprehensive and intensive education and training in milling with a focus on both theoretical and practical training. The milling credential program follows the value chain in a mill, addressing the following subjects: grain science, grain intake, pre-cleaning and storage, cleaning, wheat milling, finished product section and quality control. The first apprenticeship program has started in February 2015 with a full class of 27 apprentice millers from 9 nations. The next training will start in January 2016. The goal is to transfer the knowledge for the best use of raw material and achieve efficient operation with regard to flour yield, quality and energy use. Skills are the basis for operational milling excellence!

Company Profile: Every day, billions of people come into contact with Bühler technologies to cover their basic needs for foods, mobility, or communication. With our industrial process technologies and solutions, we contribute significantly to feeding the world's population, setting the focus on food security and safety. Bühler flour mills process around 65 percent of the wheat harvested worldwide into flour. Its contribution to processing rice and producing pasta, chocolate, or breakfast cereals is similarly important. Moreover, Bühler is a leading solution provider of die casting, wet grinding, and surface coating technologies, with an emphasis on automotive, optics, electronics, printing & packaging inks, and glass applications. The family-owned company Bühler is proud of its Swiss roots and feels particularly committed to sustainability.





Mr. Laurent Brehm

Manager for African Countries, Sefar (France)

Biography: Laurent Brehm has been working for 8 years for Sefar as Sales Manager for African countries and Responsible for Milling Industries in France.

Presentation title: Stretching Systems

Abstract: In this presentation we show how to:

- Prepare and use the stretcher
- Clean the frames
- Install the frames
- Placing the cuts in position and bring up the tension.
- Gluing with Sefra Quicktal Glue
- Remove and finish the frame. Ready to install into the sifter.

Proper stretching will bring the mill:

- I. Higher capacity
- II. Better quality of the flour
- III. Less wear and tear of the mesh
- IV. Less blinding of the mesh as the cleaners can do a better cleaning

Company Profile: Sefar is the leading manufacturer of precision fabrics from monofilaments for the screen printing and filtration markets. Its products are used in a wide variety of industries, reaching from electronics, graphics, medical, automotive, food and pharmaceutical applications to aerospace, mining & refining and architecture. With its profound understanding of the applications Sefar helps its customers to achieve optimum results in their industrial processes. Subsidiaries and fabrication centers in 27 countries on 5 continents provide local technical service for the broad range of solutions offered by Sefar. The group operates weaving plants in Switzerland, Romania and Thailand. Its Monosuisse division produces fine and medium yarns in Switzerland and Poland. In 2014 the Sefar Group achieved sales of 295 million Swiss Francs and employed some 2,200 employees worldwide.





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