IMFNEWS 09-2009

Against the trend IMF rides out the economic tempest

World market conditions have obliged us to deal with many difficulties. The problems our customers are finding to raise credit lines, the general down turn in foundry work, all have influenced the way companies in our sector must run their businesses.
It is our duty to safeguard the jobs of our employees and the financial health of our companies.
To react to this situation from the very beginning IMF's plan has been to internationalise, accentuate product innovation, and maintain high levels of employee involvement.
Amidst the general crisis, there are foundries, market sectors, niches where investment is required even if the national GDP is falling.
In the general downturn there are entrepreneurs who have been able to conclude important contracts and to keep good production levels in their plants like IMF in Luino (Italy), Sedlcany (Czech Republic), Tianjin (China), Piracicaba (Brazil). It is for these customers that innovative projects have been developed in order to reach excellent levels of quality and productivity.
Our international structure has allowed us to find customers in distant markets, and even if in the past 12 months the most important sales have been achieved in foundries operating in the " BRIC" countries , our salesmen have concluded contracts in a total of 28 countries worldwide. IMF wants to be considered a good partner, not only a supplier of equipment, and today we can provide the customers with exceptional technical and financial terms.

Gabriele Galante

IN IMF WORKSHOP: CULTURE NOT ONLY MACHINES

Recalling a historical event of workers and industrialists and its significance today.
The "riot for bread" that took place in Luino on 1898.
It has a deep meaning, says Mr. Galante in this introduction: it was the march of workers together with their employers for a just cause, a common aim: the cost of bread. A good example to follow today for entrepreneurs, for our managers, because a united effort together with our workers can help the country get out of the crisis which afflicts us now.

IMF Brasil 6 months after the official inauguration

The entrance into full activity of the new production unit at Piracicaba in January 2009 has permitted considerable improvements in the organisation of the production and especially in the very important factor of the reduction of the delivery time and of the import costs.

The two large bays each one served by two bridge cranes of 10 and 5 tons permit the production of complete moulding lines, mechanical and thermal sand reclamation plants and large and heavy machines with shorter lead times for Brazilian customers as well as for customers in Argentina and in Chile. New large and complex projects that are now being discussed whose production would have not have been possible in the old facility.

IMF s.r.o. FACILITY ENTERS NEW PRODUCT MARKETS

IMF s.r.o. - the manufacturing facility in the Czech Republic has been the main supplier of fabricated parts for IMF Group for 13 years and it is still producing complete IMF machines such as shake-out units of all sizes. Over the years IMF s.r.o. has specialized also in the sector of pipe handling and now it is able to produce complete turn key plants for the heat treatment, finishing, quality control and packing of pipes.
Complete machines for furnace interlocking have been supplied to important international groups in the iron and steel sector.
A specific area of the buildings is dedicated to operational tests.
Another new product line at IMF s.r.o. is dedicated to light alloy melting furnaces.
With the co-operation of SIB, IMF has produced furnaces for aluminium chip treatment. The equipment produced are completely assembled and installed by IMF s.r.o. technicians all over the world up to and including final commissioning.

RUSSIA

CHEMSERVICE

Installation located in an old building 120 km from Moscow, but completely renovated. Now a 100% new foundry with new moulding line for mould size up to 1200x1800 complete with a 60t/h mixer, melting plant and 10 t/h sand reclamation

One of the recent visits organized for a group of Russian Foundrymen during Litmash 2009 with great satisfaction by the participants.

system. A specially engineered solution of dust extraction hoods and filters for the collection of fumes and dust which recycle the air to maintain an environmentally friendly workshop for the operators. In this modern and clean workshop only 70 workers to produce 3000 ton/year of very good surface quality electrodes for cathodic protection of pipelines.
In the first 6 months after the installation of the new equipment the production has been doubled.

Volgocemmash

The largest continuous mobile mixer ever produced

One of the biggest Russian manufacturers of installations for cement plants, “Volgocemmash” OJSCo, from Togliatti, Samarskaya region, has purchased from IMF the biggest mobile mixer ever manufactured.
It is a T36/100 SB type mobile Mixer 15.7 m long, 8 m high, able to mix 120 ton/h of sand, with a total reach of 9500 mm. It will be used for the production of steel castings up to 70 tons gross weight for cement industries.
The company produces a large number of castings and employs a total of 1700 people, of which 200 are working in the foundry. The group is planning a large investment programme for the complete renovation of the whole melting shop.

Metallist

NEW SCREW PIPING PLANT FOR DRILLING

Metallist foundry is one of the most significant IMF references for No-Bake moulding systems. In the past few years they have installed three complete flask and flaskless moulding systems, two sand reclamation plants and three coreshooters. The new plant at JSC" Metallist", Russia that has been tested for acceptance at the IMF s.r.o. facility in Czech Republic, is now in its last installation phase inside a completely renovated building at Kachkanar, Sverdlovsk Region.
The plant can produce 20 pipes per hour of screw piping for drilling with diameter 156 to 406 mm.

This very compact plant provides pipe machining and the automatic welding of the screw head to the pipe body by means of a robot, screw piping painting, final marking and pipe collection from the line by a manipulator.

ENERGOMASH Ukraine

Pit moulding for these huge castings will be made with the use of two large double-arm mixers delivering 50 t/h of mixed sand each.

JSC "Energomashspetsstal" at Donezk – Ukraine produces large steel castings for wind generators and parts of presses that can weigh up to 320 ton

Flask size up to 5000x3000x1800 mm will be emptied on a large shake-out size 4000x6000 mm with a total loading capacity of 100 tons complete with pre-reclaimer. It is the biggest shake-out delivered to C.I.S. countries.
Sand is recycled by a sand reclamation system complete with separation of chromite sand.
The plant will be running by the end of the year.

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USA - METALTEK

This new chemical-moulding plant is in the final assembly phase at Metaltek at Pevely, Missouri USA. When completed the plant shall be able to produce 25 complete moulds of hour size 1150x1300x500 /500mm.
All the operations are automatically managed by the control software. Only few and simple operations are left to the few operators necessary (three or four).

The Fast Loop type moulding line consists of a 50 ton/h mixer, one vibrating table, a strickler, rollover, painting station, drying station and an automatic closing handler.
A “Zero Impact” manipulator supplied collects the castings from the shake-out grid through the control of the operator outside the sound-proof and exhausted shake-out cabin

INDIA

IMF Training Seminar in Coimbatore, India

A rewarding 3-day training seminar, from 16th to 18th July 2009, has been hosted by IMF India – Coimbatore for customers from 11 different installations in India.
IMF Italy, with the assistance of IMF Indian specialist technicians ran the training courses covering technical and maintenance subjects.
After the success of this type of training future seminars are being planned. Specialized on-site training is also available.

Yazkan

New installation in Turkey

Semi-automatic moulding plant using furan resin for the production of steel and nodular iron castings weighing up to 300 kg.
The plant is installed in a brand new foundry situated in an industrial area not far from Ankara.
The layout concept provides the maximum flexibility of production typically required by all jobbing foundries.
The installation is completed by a mechanical sand reclamation system and collection of dust and fume emissions into atmosphere.

CHINA

DALIAN HUARUI - A Chinese foundry in search of excellence

The plant at Dalian Huarui Heavy Industry Casting Co. LTd - Dalian, produces 80.000 tons/year of nodular cast iron castings for wind power generators and copper alloy castings for marine propellers.

Shuttle systems and lean production permit the production of 2 complete flasks per hour of size 4300x3800x1250/1250 mm, thus avoiding storage problems.

This first class company is basing its development on the search for excellence and on innovation to produce great quality castings to be sold all over the world.

BUSINESS

'Wind can power up entire nation'

▸ Research body estimates wind power potential at 700-1,200 gW

By Zhang Qi

Xiao Zinke

IMF

AMPO SPAIN
at IDIAZABAL (GIPUZKOA)

A completely engineered highly mechanised moulding system to produce steel valves.
Within the project for the complete restructure of foundry dedicated to the production of steel valves, AMPO – Spain has been put in place and started production with a high level mechanised moulding system that permits the production of two or more complete large flasks per hour, size up to 2500 x2500x1250/1250 mm inner size. Flasks size 3000x3000 mm are also produced on the floor with the same mixer.
The system has been studied to run patterns and moulds in production on plate size 2800x 3000 mm by means of one main car and independent working stations on powered roller tracks.
Among the machines that compose the installation there is one 50ton/h mixer, one 25 ton load vibrating table and a special

manipulator for moulding and water painting operations.
Two gas drying ovens complete the mould preparation, before setting the cores, produced with another 30 t/h mixer, and before closing.
The plant is completed by a 4000x3500 mm shake-out with sound proof cabin and a pre-reclaimer.
IMF has supplied the complete engineering project for the restructure of AMPO.

N.V. FERROMATRIX BELGIUM

Is floor moulding a thing of the past?

The Belgium-based foundry of N.V. Ferromatrix, part of the Van de Wiele Group, has set up an advanced IMF project that represents a quantum leap forward in the automatisation of large no-bake flask mould production.
The foundry, which specialises in the production of nodular iron and ADI heavy castings, has extended the existing foundry in the town of Marke with a new plant dedicated to the production of wind turbine cast components.

The new automatic core setting and moulding line permits to produce two complete flasks per hour, max. size 4200 x 3200 with a maximum cope/drag height of 1700mm (2200 mm complete).
The Fast Loop consists of one 100 t/h continuous mixer and a second 30 t/h mixer for core production, equipped with the most advanced accessories, one vibrating table, parallel stations for core setting and a completely automatic closing handler to strip, paint and close flasks up to 25 ton (30 ton complete flask).
The whole system is managed by a dedicated production software suite and requires only three / four operators.
A very large shake-out size 4500x4500 mm, one 30t/h mechanical reclamation plant and a sand pneumatic conveying system complete the system.

France

Hachette & Driout NEW FOUNDRY IN FRANCE

Hachette & Driout commenced production in their new steel foundry December 11th 2008, creating something of a sensation during a period of economic contraction.

"IMF receives the Presidential seal of approval"

The company took the decision to counter the challenge from low labour cost countries with investment in modern facilities requiring little labour by means of a high level of mechanisation. By remaining on their existing site in St. Dizier 250 kms east of Paris, H&D ensured access to a skilled core of foundry personnel and other essential infrastructure support. The new foundry features IMF's latest technology including mechanical and gas fired thermal sand reclamation, good quality sand being a first prerequisite in the drive to reduce scrap rates. Precisely mixed moulding sand is supplied by IMF T36 series mixers. New shakeout and dust extraction plant was also installed and supplied by IMF. The company plans a 100% production increase using the new plant.

FERRY CAPITAIN

Ferry Capitain Group, France have equipped their steel and cast iron foundries at Bussy with two mobile mixers for the production of large size castings.
Mixers with 9 mt long first arm and 3 mt long mixing arm with

12 m total reach can vary the sand discharge height from 1 to 3 meters from the ground, which facilitates the access to the mixing arm for cleaning operations.
All the production data are managed from the operators position and connected to the central control that can store and control all data like mixing recipes and automatic adjustment of the flowmeter, resin selection, time setting, quantity of sand, binder used on each mould, maintenance assistance, etc.

HEINRICH

From green sand to no-bake.

To reply to the requests of environmental improvement of both inside and outside the foundry, the management of the company Heinrich at Molsheim started in 2006 the complete modernisation of the foundry and of the machining and painting departments.
The first phase of this 3-year plan was the creation of the new two-level coreshop.
The second phase, the most important, the re-arrangement of the manual moulding line, that already used the furan process, by replacing the green sand moulding system with a new Fast Loop type No-Bake moulding line for moulds size 850x850 mm, while the main building was completely re-built.
After about 8 months of production the third phase has been initiated with the installation of mould stripping, pouring and cooling lines with a shake-out and sand transport to the existing reclamation plant. New buildings have been added to house the fettling, machining and painting shops. After three years of work, during which the production has not been interrupted, Heinrich foundry is ready to face the future with all the working and environmental criteria required to meet current legislation.

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SCOTLAND:

ON THE RIGHT TRACK WITH IMF

The rail engineering division of BALFOUR BEATTY, leader in the manufacturing and installation of railway switches, also known as points, has commissioned an interesting installation that produces flaskless moulds up to 9 metres and with flask up to 12 metres long. Top cores up to 3 m length are produced by a semi-automatic Fast Loop system.

9-meter long moulds can be easily stripped on the steel plate on the automatic rollover machines installed on both systems.

The two moulding systems equipped with two articulated mixers complete with the most advanced automatic controls, two mixers for chromite sand, powered transfer cars, powered roller conveyors and special hydraulic painting station permit the most efficient production of manganese steel railway switches.

The plant was fully commissioned early in 2009 and represents the largest investment in the UK foundry industry this year, and the most important in Scotland for decades.

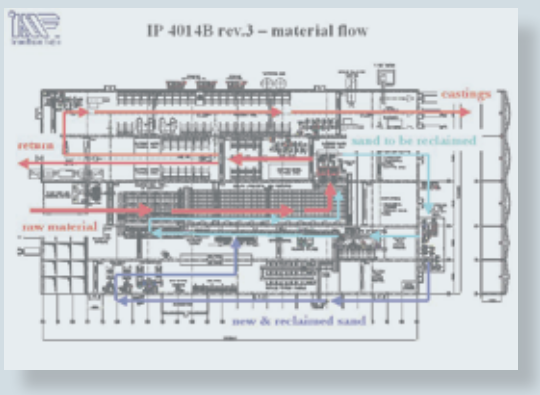
IMF ENGINEERING DEPARTMENT

FEASIBILITY STUDY - PROJECT ENGINEERING - ENGINEERING

IMF's engineering department offers a complete team of specialists in all types of foundry techniques and all aspects of casting production. It is constantly involved in the study of new turn-key projects requiring specific technologies and also equipment whether manufactured by IMF or not.

Amongst the engineering studies carried out are those concerned with the production of castings for earth movement and wear parts, wind turbine castings, nodular iron and steel valves as well as aluminum foundries to produce castings for high speed trains, high voltage switches and medical equipment. Some case histories below:-

In South Africa–complete foundry to produce steel and alloy mining, slurry pumps up to 16 tons finished weight, 10000 t/year final capacity.



In Brazil—Green field foundry to produce stainless steel, steel and alloy castings for hydro, thermal power and mining up to 32 tons finished weight, 18000 t/year capacity.

In Russia—Complete foundry for Iron 4000 t/year and Heat resistant Steel 16000 ton/year producing parts for petrochemical exploration, transport

In Europe—Green field complete foundry to produce grey iron and future nodular iron container parts up to 15 tons, 7500 t/year and a complete foundry to produce aluminum castings for high speed trains, High voltage switches and specialized medical imaging scanners, final production 6000 t/year, with options for Asian installation.

SPECIAL EVENTS 2010

IFEX - INDIA
15-20 February

CASTEXPO - USA
20-23 March

FOUNDEQ - ITALY
14-17 April

LITMASH - RUSSIA
24-27 May

FOND-EX – CZECH REPUBLIC
10-14 May

METALCHINA – CHINA
11-14 May

METALURGICA – BRAZIL
14-17 September

METALKIELCE – POLAND
27-30 September

ANKIROS – TURKEY
11-14 November

IMF NEWS
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