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STEEL SERVICE CENTER – NEW PHENOMENON

1. Introduction

Trying to offer better services, the steel industry often develops new business relations and forms of cooperation with their customers. Primary intentions of the steel contractors are to take orders from their customers and offer them solutions for their manufacturing problems. In principle, this means extension of the production chain in the steel industry.

The steel market will have to further rely on the broaden profile of the performance. The producer who will offer a portfolio with wide range of materials, variety of services, and effective performances will have the best chances to succeed on the market in the future. That is the reason metallurgical plants do not offer only their essential products but also other components, systems and services. This kind of development is now known as the „Steel Plus”. Pro-customer orientation brings success to the steel industry.

In the nineties, there was an unprecedented boom of companies, which were engaged in treating and refining products of the steel industry. Taking foreign companies as an example, they started to offer services that were new and mostly unknown to their customers. More and more steel service centers started to operate on the Czech market: new companies, new processing facilities, new technologies, and a new business spirit. As well as in other spheres of business, there were some companies, which were taking advantage of the less informed customers and were benefiting from them. Service centers had to experience both positive and negative aspects of business during the period of their progress.

2. Service center characteristics

There are some companies which are interested in full improvement services in the field of purchase, sale and modify of metallurgical materials, which means that

they increase quality of material produced by steel plants. These companies are also known as the service centers. These commercial units are not only independent service centers (independent entrepreneurial unit), but also wholesales and steel plants within the frame of their divisions. They are filling the niche of the market by providing services and they are reacting on market requirements.

2.1. Reason for creation of service centers

One of the few reasons for the creation of the service centers and wholesale trade was integration of the operations, mainly in means of shifting down the stream. Shifting up the stream became less popular in the last few years and it has proved the changes of the state. Integration down the stream includes not only decision of the few steelmakers to add value to their operations but can also include shipping to the distribution activities and the activities of the service centers. The ability of the steelmakers to profit from their network depends essentially on the ability of the steel plant to approach their customers, support the range of their own products secured by their logo, and satisfy their customers in means of product specification, measurements as well as cost and to be flexible to the new trends. Negligence of the company could result in profit loss or other company gains.

Another impulse for the creation of the service centers is to create an inquiry of postproduction, which is based on specific customer requirements. A steel plant either does not have the necessary equipment or the amount of the order exceeds the manufacturing capacity of the plant. Here is the chance for the wholesalers who own their service centers to seize the opportunity and to serve the unshielded part of the market. Another impulse is intentional creation of the quotation. The construction of the new service center or the operating unit in the warehouse is realized, and starts to produce a product, which had not existed on the market before. Of course, the first thing prior to the realization of such a project is a thorough analysis of the market scene.

2.2. Orientation of steel service centers

The wholesale trade, with its specialization of broad range metallurgical products has strictly limited orientation. The basic business article of almost all wholesale companies is a storehouse sale, which focuses on purchasing, stocking, modifications, and selling of the metallurgical products, metallurgical secondary products and non-ferrous metals. Circle of the customers is composed of thousands of small and midsize industrial, construction, commercial, and agricultural companies for whom is not effective to buy straight from the maker. Most of service centers are orientated on tabular products that have the highest service ability. This is proof by the first place in consumption of the metallurgical products in the Czech Republic, which takes up to 46%. The second largest percentage maintain long products with 31% followed by pipes with 11% and then the rest (drawn wire, forged pieces, pressed pieces, sheeted steel, etc.).

2.3. Value increasing services

There are many methods in which a steel plant can add value to their manufacturing operations. In principle, there are two methods. The first method is to enhance a structure of the production by concentrating on higher added value and consequently, but not always, the products with higher margin or by reduction of the products made from common steel.

The second method is a change of the company organization or the way a company merchandizes, manufactures, and exercises its workmanship in individual areas. Companies (service centers, warehouses, steel plants in the framework of divisions) provide the servicing in the field of the purchase, sell and adjustment of metallurgical materials. I am listing activities that are increasing the value of the basic products from the steel industry (domestic and foreign).

Value increasing services:

1. Guaranteed straightness
 - by warming of material, steel straightening up to 130 mm,
 - by press up to 130mm.
2. Separation
 - by accurate angular cutting,
 - by rectangular slitting on the strip,
 - by trapezoidal slitting,
 - structural steel (is softer) scissors, burning,
 - 2 PH materials-flame cutting (oxygen, acetylene),
 - AK metal sheets-plasma burning and cutting.
3. Cleaning edges
 - by hands (grinder),
 - by grinding units,
 - charring machines.
4. Curing the surface after hot-rolling
 - the surface is scalded-sharpening by blasting (manual or blasting line).
5. Exact forge
 - heat forging,
 - cold forging.
6. Protective coat application
 - lacquer, paint, plastic,
 - galvanizing, heated zinc-coating.
7. Parting of bar material.
8. Treating of the concrete reinforcing bar and net treatment.
9. Material testing
 - spectral analysis,
 - testing of the material homogeneity by ultrasound method.

10. Packing of material-material protection during transportation.

11. Other activities

- bimetal plates-combined stainless steel and common steel-high servicing value of this material especially in the food processing industry.
- device for pairing of matchboards-company is creating a construction units, they supply matchboards (on the picture) with the connecting profiles and welding material.

2.4. Customers of the service centers

Most customers of the service centers and warehouses are companies from the automobile and building industry. They usually require long products (concrete reinforcing bars, bar steel, etc.), tabular products (strap iron, heavy plates and reels, sheet metal and rolls, etc.).

3. Recent stage of service centers

3.1. Situation in the Czech Republic

During a period of the planned economy (before 1990), there were market roads of the metallurgical products distorted by managing of the fund production. The flow of the material from the metallurgical plants were primarily determined by destinations of the fund schedules. Most of the volume was distributed from the metallurgical plants straight to the subscribers of all branches. A significant part (about 1/3) was marketed through a monopoly consumption company Feronia with warehouses spread across a great portion of the one time Czechoslovakia. More than 10% of the consumption of metallurgical material (about 300 000 tons) were realized by trains and so called easy manipulation. Without the manipulation in the warehouses the why even the large machinery industries were supplied through Feronia was that funds of their consumption were placed in Feronia without the matter of size of the delivery. This was contributed to the fact that the indicators of the company and own interests of the industrial concerns in the stock evolution will not be so strict for the consumption company preferred indicators of the company activity survey were indicators of quantity (tons, earnings, etc.), which did not incite the consumption company to divide or to adjust material delivery accordingly to the individual needs of the customers. By directing fault to this fact, every industrial concern (among them MSV Studenka, Tatra, etc.) or the construction companies were setting up index lines forming machineries. For concrete reinforcing bars, forging lines etc., which were used only for establishing company, the idea of the service centers was brought up at the end of the eighties as a new perspective.

After 1989, the cooperation with the foreign companies was eased and the elements of the modern warehouse style trade with metallurgical products started to flow to the ČSFR and to Feronia. Often visits of neighboring Austria and

Germany lead to the search of foreign exchanges not only for the investments into warehouse technologies, but also for the progressive installments of the indexing, straightening and forging capacities right in this company. Feronia had invested in the indexing attachments for high-grade expensive steel.

During a time the company had finished its indexing, straightening and other capacities in all secondary plants. Large-scale indexing attachments for cold tabular products are the top of these investments. We can say that today, warehousing capacities of Feronia are the biggest capacities of the service center's style. The progressive development of the machinery started also in the competitors companies with Czech financial capital as well as in the companies with foreign funds that started to penetrate our republic. For example, Scholz Centrum Kladno, branch of West Alpine Vyškov, Klöckner Stahlhandel Praha, Alu-Koenig Frankstahl Modletice etc. These commercial, storing and producing companies brought their know-how from their essential companies in Germany and Austria. Through the chain of the wholesalers and service centers in the Czech Republic goes about 15-20% of the used metallurgical production, comparing to the world, where about 40-50% of this production goes through the chain of warehouses and service centers.

3.2. Service centers around the world

The cold-rolled coated sheet metal used for the car bodies is a very important part of the world metallurgical production. According to the Eurofer, this market covers about 28% of the steel production in the European Union. Steel for the car bodies is of top quality and is not usually used in any other industries. Supplies of this steel are more or less straight in between the steel plants and the carmakers. Excluding the special service centers and the sale-representatives, responsible for the international transportation and the logistics, most of the sale-representatives are not involved in this kind of trade. There are a few markets with the special steel that are influenced only by specialized salesman. These markets are defined either by their specific character of their meaning – ex. the military department – or by overweighting technical aspects – ex. matchboards, where the specific knowledge and craft are needed. On these markets the steel plants and the end users are usually using the direct trade. Large groups of other branches using the steel are customers of the wholesalers.

3.2.1. Steel wholesalers

Because most of the steel plants concentrate their production only to the smooth-rolled, mostly steel thin sheets or other long products and then on thin or heavy products, only steel wholesalers are offering broad assortments of steel products to the customers. We can call this kind of company the next door steel plant, which is capable to deliver „Just in time” whatever, whenever, and wherever, the customer needs are. With its output in the field of global and material supply, stor-

ing and offering the services in the field of „Just in time” deliveries and at least, but not last, in the financing of not only their own, but also their customers funds in the time period of four weeks, this group of wholesalers is a very important part of the global economical system.

More than any others the wholesalers and service centers in the EU, which have about 11 million tons of steel in stock with corresponding amounts exceeding 4 billion USD, mainly target to fulfilling this role. According to the value of their funds, this group is very sensitive to the changes in the price of steel.

I would like to bring up another fact from abroad. It is a formation of the micro-steel plants and the service centers in their neighborhood. Micro-steel plants are producing rolls of heat-rolled steel and that is why the pickling, oiling, slitting, and galvanizing operations accumulate around these plants. Advantages of these relationships are a lower cost of transportation ever because of very close co-existence.

The steelmaking plants and the service centers do not have any mutual obligations and are able to change their strategies in case of new requirements. Another important aspect is a fact that lower stocks can be held by producers and can be realized „just in time”. Deliveries another recognition is that the sector of the wholesaling and service centers is busy with the investments, takeovers, fusions, and changes in the management. For example the Joint-venture in between Luxemburg company Arbed and the French storage company Champion or taking over the French company Arus of France by the German Klöckner Stahl Und Metallhandel and other.

First group is formed by the independent international wholesalers, which buy and sell large amounts of steel from one country to another. In most cases they do not have a sense of cost situations in the different markets. This might be because of the fact that they are partly marketing with steel as well as with other commodities like gas or rice. This kind of business can be considered a kind of trade, which does not have its essential function on the market with steel, which means that connecting the steelmakers with the users of the steel.

The second group of wholesalers is those whose main reason for their existence is the export of steel from one or more important steel plants to their international customers. In many cases, these wholesalers are practicing a clean merchandise business, which means they buy and sell steel from one foreign country to another, but mostly with a mutual linkage. This category of the representatives in steel has their specific product and pro-market oriented functions on the steel market, mainly in marketing and distribution of the product for makers in the foreign market.

Finally, there is a category of the wholesalers with the warehouse or service center for steel or other materials such as nonferrous metals or plastics. Unlike the first two types, their politics is pro-customer orientated. Deliveries „Just in time” are according to the customers needs very binding task for this type of company.

This ground plays a very important role in the steel distribution. It is a vital commitment between the steelmaker and the customer. It takes up almost 30-40% a fraction of the steel market inside of the EU and a 50% fraction of the North American market.

4. Recommendations for the further development in the Czech Republic

The market of the Czech Republic is very specific. Most of the steel producers attempt to compete with the existing and well known service centers. They are creating their own manufacturing capacities and the communication between the producers and the service centers is not very good. From the view of the service centers the steel plants are attempting to take the biggest piece from the production, sell on the market, sell ratio in our republic is 80:20, for the EU this ratio is 60:40 and in the USA it is 50:50.

The Czech Republic should be moving in the same direction – the service centers are calling for. Disadvantage of the Czech Republic is a relatively small business market. Most of the service centers and the wholesalers are targeting only the Czech market and very small percentage of their sales is coming from the export to the countries of the EU or other countries of the Central and Eastern Europe. Their production capacities, professional skills of their employees and storage capacities are on the worldwide level and there is nothing to be ashamed of. One problem that could become an obstacle when exporting is the Czech currency, which is becoming slightly stronger and thus lower the ability of the potential domestic exporter to compete.

Sometimes, the Czech service centers and wholesalers are complaining about lower quality of steel made by domestic steel plants and the necessity to buy steel of better quality from foreign producers, if this is what the customer requires. Solution to this problem could be in better communication and better exchange of information and know-how between the service centers and the steel plants. It is important to focus on the needs and demands of the customers, to increase sale of the Czech steel plants and to lower import.

Many new investor activities, that are offering new opportunities for our companies, went to realization in the Czech Republic. Important purchasers of steel products are automobile and building industries. It should be priority to the domestic companies to ensure the sale of their products to those companies that have been already existing on the Czech market (Škoda Auto, TPCA Kolín) or to the companies that are planning to enter the Czech market in the near future, for example the new Kia factory in Žilina, or possible realization of the automobile plant Hyundai in North Moravia.

Steel plants and service centers alone are not able to compete with low-cost import of metallurgical products from the countries of the EU and former Eastern Block, which are often imported to our country for dumping prices. This is where government has to intervene with import regulations or to offer to the Czech companies the same concessions that are offered to the foreign investors.

I would like to mention the outsourcing as well, the new solution of the old problems. Yes, sometimes „expulsion” of some activities out of the company can solve a long-lasting problem and today, the outsourcing is becoming a very fashionable „tool” in Czech business conditions. The steel plant does not have to get rid of their production capacity for the benefit of the service center, but only to rent this capacity for a provision. Steel plant itself will focus on its own production program and will pass the continuing operations to the cooperating company. Worldwide, there is a common type of the cooperation in between the producers and wholesalers: Joint – venture, companies that are owned in the 50:50 ratio. It would be possible to apply the same principal in the Czech republic. Steel plants will gain their „very own” distributor with his own net of clients, the good name of the distributor. Wholesale company will gain an exclusive business conditions, goodwill of the steel plant and an open door to the new markets. As well as establishing Joint – venture companies, also fusion is very popular worldwide. If there are not good conditions for a similar plan, it is possible, if there is sufficient capital coverage, to take over functioning service centers or the net of the wholesalers. I can see the same possibility for the wholesalers in here. They can extend their capacity by purchasing other service centers, net of the warehouses or the wholesale companies. This way they will extend their capacity, lose a part of their competition and will penetrate to those parts of the market, where they have not had any representation yet. At the same time they keep the customers of the former company and do not have to search for new contacts.

Customers complaints addressed to the service centers are usually pointed to the delivering conditions. The service centers are not always able to deliver requested material on time and some shipments are delivered to its destinations later than it was stated. Also certificates of the material attestation are the cause of problems to the customers. Some service centers fail to deliver on time therefore some customers cannot start their production on time. Only solution of this problem is to change a service center.

One of the ways how to improve services from the side of the service centers, wholesalers and steel plants is to establish new communication methods and to expand the communication system EDI in first place. The customers of the service centers and the centers themselves often say that non-compatibility of the systems prohibits them from their wide spread. Here is the chance for the clearing centers to provide their services in the EDI system, VAN net, to the customers, wholesalers, service centers and the steel plants. This can eliminate problems with the

compatibility of the computer systems (IS/IT) and better cooperation of the marketing subjects.

Another possibility and the recommendation at the same time is a use of the new methods of the material records such as barcodes, which will make the material operations more effective. For example, in the textbook „Logistics” [4] there is written: probability that the mistake will occur when using a barcode is presumed from 1:10 000 to 1:1 000 000. When entering data manually, this probability is from 1:25 to 1:30.

I hope that the current situation on the market with the metallurgical products will improve in the future. That the mutual relation between the steel plants and the service centers will be less competitive and that the companies will become cooperating partners with friendly relationships and that the customers will be more involved in this manufacturing process.

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CENTRA SERWISOWE STALI – NOWE ZJAWISKO

Streszczenie

Artykuł ten prezentuje centra serwisowe stali jako przedsiębiorstwa, które są odpowiedzialne za wzrost sprzedaży i modyfikację w materiałach metalurgicznych oferowanych na rynku i sprzyjają tworzeniu nowych rynków zbytu. Ze względu na ich charakterystykę i zorientowanie, z powodu ich kreacji i specyfikacji, czynności w nich wykonywane powodują wzrost wartości podstawowych produktów oraz liczby klientów. Podsumowując obecny stan centrów serwisowych, ich sytuacja w Czechach i na całym świecie umacnia się. Artykuł ten proponuje pewne zalecenia związane z przyszłym rozwojem centrów serwisowych w Republice Czeskiej.

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