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Revolutionary in material handling

Dynamis specializes in unique and flexible systems for material handling and shape measuring. Our self-developed systems enable picking of unsorted goods by means of a robot, straight from a bin, i.e. Bin-picking. The technology can also be used for advanced robot control in tough industrial environments like forging and casting. Quality control of shape accuracy in production is another application for which SensActive® is very well suited. Dynamis primary customer focus is on system integrators in engineering, casting and forging industry.

New products

We are currently expanding our product range with several useful products in material handling. Our well proven Bin-picking system has developed into additional models and we are presently launching our Tracker-line for robot guiding. We are also introducing our German cooperation partner's robot cells.

Europe shows great interest and the launch continues

The international interest in our material handling systems is great and we receive a lot of positive response. During the autumn we will continue to launch our systems mainly in Germany through some hand-picked business partners.

Fair 13-16 october

Welcome to visit us at the Technical Fair in Stockholm. We will present our Bin-picking system and a couple of new products. Read more about the fair on our website www.dynamis.se

We will see you in hall A, exhibit stand A15:40



Tekniska Mässan

Scandinavian Technical Fair



MD-comment

I am pleased to announce that we are a member of the Swedish Binar group, which in April acquired Dynamis. Binar has long experience in the automation industry and the synergy effects will benefit us.

Our launch in Europe is progressing according to plan despite the ongoing recession and we hope for a break through during 2010.

Our Bin-picking system meets a need that up till now has been impossible to satisfy. We are proud to launch a new product, planned in the SensActive® line of material handling systems, i.e. the Tracker system. Furthermore we are pleased to introduce one of our business partner's products on the Swedish market.

Anders Reyier MD



SensActive®

SensActive comprises a group of material handling systems, all featuring computerized object recognition. Object recognition and laser-based scanning technology makes it solid and insensitive to operational disturbances even in tough environments. The technology is found in our Bin-picking products and in the new Tracker line.

Bin-picking

SensActive® Bin-picking picks and handles complex parts by means of a robot directly from a bin, e.g. a Euro pallet with collars. This is used when machining parts or performing assembly work.

The parts can lie unsorted in the pallet, even vertically. No separating spacers are required between layers thanks to a 3D measurement technique. The system is flexible and allows fast change of components in production. Presently there are three products BP800, BP800L and BP450, see data sheet.

Advantages of Bin-picking:

- Picks unsorted goods straight from transport packaging.
- Handles most materials, such as steel, plastic, castings and forgings, problem free.
- Can handle complex shapes and is height independent.
- Insensitive to interference of ambient light.
- Easy pattern laying of new objects (requires only a 3D CAD-model of the object)
- High flexibility with rapid conversion when switching components.
- · Simple installation.
- · Saves space and requires small floor space.
- · Is noiseless.
- Handles the object gently and without wear.
- Allows advanced pattern laying onto pallets thanks to full object control.

Pattern laying

SensActive® pattern laying combined with Bin-picking is a remarkable programming tool in 3D environment. With the help of an easy-to-manipulate, 3D-CAD model on the system display, the operator simply indicates the pattern in which he or she would like the objects to be organized. The robot then takes over, organizing the parts into the desired pattern automatically. Switching component in production and programming new component is swiftly carried out.

Tracker

SensActive® Tracker unit is usually mounted on the robot and displays information about distance and sideways position to the object being handled. The Tracker guides a robot to pick hanging objects from a conveyor where the distance to the object changes during the process or is not known in advance. It is also used to pick



larger lying objects off pallets, e.g. boards, card-board etc. where rotation and height are measured

when the object is being picked thus saving cycle time compared to other methods. Programming of new components is rapidly carried out as well. The Tracker also measures position of surfaces of the ob-

jects being handled. Currently there are three different models TR01, TR02 and TR03 with different performance and various functionality options, see data sheet.

Machining cells

Dynamis can offer machining cells that are delivered complete with machining stations and handling robots from our German cooperation partner WMS engineering. The units are used for deburring and basic machining. These cells

can also be delivered with SensActive Bin-picking system for picking of parts. See data sheet.



Best solution?

Sometimes there can be uncertainty about which material handling solution that would be the best choice for the project and also about its estimated profit. Dynamis can offer analysis that show if the part to be handled or the preferred cycle time is achievable with existing system solutions. We have many years of experience in machine development and production cells and can offer customized solutions for various types of material handling and inspection.

Below you will find some examples of our products' wide range of applications:

MEASURING HOT FORGINGS

Glowing forgings are measured directly in the production line to guide a robot to pick and handle the object. A customized system based on SensActive® functions to withstand the tough environment. "The only technical solution that could meet our demands"

Jari Ahola, Bharat Forge Kilsta

MEASURING CENTER OF LARGE FORGINGS

Forged shafts are measured to find optimum rotation center before turning. Measuring is carried out using Tracker TR01 and software.

"An investment in this solution will give us saved measuring time compared to manual measuring and should help us to optimize machining thus reducing steel cutter consumption. We also expect increased quality."

Jan Murman, Scana Steel

PICKING BOARDS FROM PALLET

Picking of boards stacked on pallets. Tracker TR01 and software are used.

"Nice solution and easy to install"



PICKING FORGINGS FROM HANGING CONVEYOR

Forgings are picked by means of a robot directly from a hanging conveyor using a Tracker TR01 and software. The parts are organized in patterns on pallets, in some cases with separating spacers which are also picked by the Tracker.

"We have many different components to pick and demands for rapid conversion between components. This solution met our demands and moreover we could stop our heavy manual working method."

Jari Ahola, Bharat Forge Kilsta

MEASURING OF SHAPE ACCURACY OF BEAM

Large beams for the automotive industry are handled by robots where the shape accuracy is measured by means of customized a measurement system. The system is based on SensActive® and is very flexible when switching components. "A fast process flow with solid results"

PICKING CASTINGS

Picking of unsorted castings is done directly from pallet. The Bin-picking system BP800L is used in this application.

"We must handle several hundred different object variants in our cells and this is the only solution flexible enough to accomplish this. Furthermore it requires minimum space and maintains a low sound level."

Ronnie Bergh, Haldex Brake Products

PICKING STEEL OBJECTS

Bent steel parts are picked unsorted directly from bin and are moved forward to welding cells in the automotive industry. In this application the Binpicking system BP800 is used to pick from bin and pallet.

"We have been waiting for this"

Binar

In April Binar AB acquired Dynamis from our previous owner that in the future will consolidate its business to the energy sector.

The Binar group has a wide range of activities in industrial electronics and industrial production equipment. Binar supplies services and products in Lean Production, industrial control systems, press automation, alarm- and signaling systems, ergonomic lifting equipment, material handling and machine safety.



Besides Dynamis, the group consists of the companies:
Binar Elektronik AB
Binar Olofström AB
Kahlman Produkter AB
Arion Sweden AB
Titech System AB
Standby AB
Rostfritt & Smide AB
Nohab Industri AB
and sales offices in Europe.

See www.binar.se









Dynamis AB

Gammelbackavägen 6 SE-691 51 Karlskoga, Sweden Tel: +46(0)586-673 60 info@dynamis.se www.dynamis.se Dynamis AB is member of the Swedish Binar group that engages in a wide range of activities in industrial electronics and industrial production equipment. Binar supplies services and equipment for Lean Production, industrial control system, press automation, alarm- and signaling systems, ergonomic lifting equipment, material handling and machine safety.

Dynamis AB is quality- and environmentally certified according to ISO9001:2008 and ISO 14001:2004.