

# UNISIGN EXPERIENCE

# @WORK



## General industry

Case study



### Application

Milling large machine parts

### Material

Steel

### Customer

De Rooy Slijpcentrum, the Netherlands

### Machine type

- 1x UNIPORT4000
- 3x UNIPORT6000

### Benefits

- Gantry configuration saves space on the shop floor
- Very convenient to operate
- Excellent value for money

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## Successful start in CNC milling market using UNIPORT machines

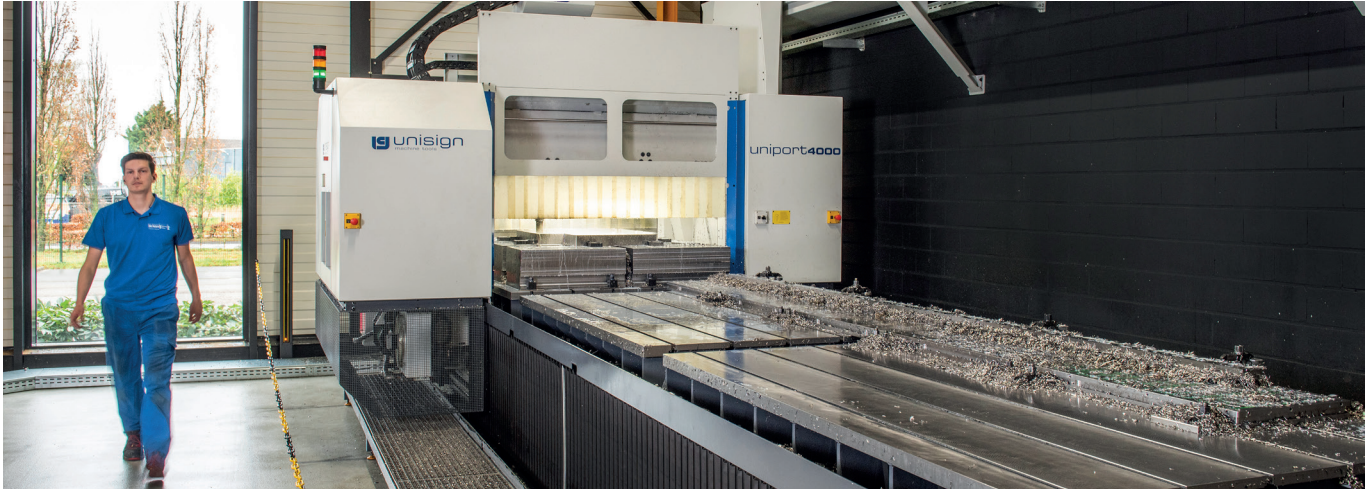
### About our customer

During the past 80 years, De Rooy Slijpcentrum in Nuenen, the Netherlands, has built up a strong reputation as a high-tech grinding expert for the metal industry. At their own grinding centre, De Rooy offers services such as CNC surface grinding, profile grinding and cylindrical grinding.

In 2006, with the third generation of the De Rooy family at the helm, the company became known as De Rooy Precision and successfully launched a new specialism: CNC milling of complete precision workpieces. This unique combination of grinding and milling services has enabled De Rooy to become 'experts in precision'. And that's why mechanical engineers in the Netherlands and further afield know De Rooy for their excellent reputation.

"Our grandfather founded the family business in 1939," says Adam de Rooy, who runs the business together with his brother Dirk and cousin Frans. "Grandfather De Rooy used to grind industrial blades for the wood and tobacco industries located in the Eindhoven area. In the late 1950s, my father and uncle joined the company and we started to specialise in component grinding. Over the years, we have expanded our grinding specialism and it's still an important part of our business. But now, milling is our growth market. Last year, we built a 4000 m<sup>2</sup> workshop where we have all the space we need for our milling department. And now the fourth generation of the De Rooy family are working in the company, countless opportunities still lie ahead."





### Long-term relationship

For both grinding and milling, De Rooy has an innovative machine park, with the very latest machines, including several from Unisign. De Rooy also has its own 3D measurement centre for checking dimensions and inspecting workpieces. De Rooy has been working with Unisign for many years, says Adam. “We have known each other for a long time. And I even did an internship at Unisign. Not only do we use various Unisign machines for our milling work, but we also grind parts for Unisign which they then use in their machines.”



### Bold move

In 2009, at the height of the credit crisis, De Rooy bought its first UNIPORT6000 from Unisign. Adam: “That was a considerable investment in uncertain times. Fortunately, our customers were very pleased with the results. We had often been asked whether we could also machine the ground steel sheets we supplied. So we started doing this, and very successfully too. Two years later, in 2011, we bought our second UNIPORT6000, which we configured to

a length of 16 metres, a third followed in 2013. Finally, based on our good experience with Unisign, we replaced our old UNIPORT4 machine with a UNIPORT4000 in 2021.”

### Machine parts

De Rooy’s customers include well-known companies such as ASML, Siemens, Philips and Fuji and the company is also active in a range of sectors, including offshore, semiconductors and food. The majority of workpieces are large machine components which must be machined to meet clients’ strict accuracy requirements, whether these are single pieces or small production runs. Adam de Rooy: “Most of all, we prefer components that require grinding and/or measurement work. We use our whetstone grinding machines for thickness machining. Then we carry out the necessary milling on our Unisign CNC machines. If necessary, we then use other machines to regrind and/or measure the workpieces.”

### Gantry model

Adam de Rooy is very pleased with the working relationship they have with Unisign: “I think Unisign is the only manufacturer in the Netherlands who can supply this type of CNC machine. The machines are excellent value for money, are also easy to operate and the ergonomics are good too. Our operators enjoy working with them. And Unisign is not very far from us, which is also practical and efficient for servicing and maintenance.”

Did you have any special requirements when you were considering purchasing the UNIPORT machines? Adam: “We have equipped all machines with a universal machining head and automatic tool exchanger with an extensive set of tools. What’s more, we opted for a gantry model, because this configuration saves a lot of space on the shop floor. Thanks to our Unisign machines, we have been able to take the bold step and expand our business into milling with confidence and have also built up a good reputation in this market.”

### General specifications - UNIPORT6000

#### Work area

X-axis, longitudinal travel: 4000 –28000+ mm  
Y-axis, cross travel: 1500 / 5000 mm  
Z-axis, spindle stroke: 1000 / 1250 mm  
Portal horizontal clearance: 1500 - 5000 mm  
Portal vertical clearance: 1300 / 1550 mm

#### Main spindle and horizontal spindle

Power: (S6-40%) 36 / 54 kW  
(S1-100%) 26 / 39 kW

Speed: 6000 rpm

Torque: 720 / 1000 Nm

#### Tooling

Tool holder: HSK100A / SK 50 / Capto C8  
Number of tool pockets: # 28 / 214  
Tool change time: 10 sec.

#### Axis drive and feed system

Rapid transverse / Feed rate  
X, Y and Z-axis: 40,000 mm/min

