TO CUSTOMER DESIGN OR PROVIDED BY US

The extrusion industry requires materials and components that can cope with extremely difficult conditions. Having worked together with extrusion plants for more than 30 years, we have seen many problems and success stories and have definitely learned a lot. High quality and creative solutions stem from the combination of the experience at Uddeholm Machining and the highly qualified researchers and application engineers of our Uddeholm sister companies.

We produce extrusion components in our plant in Hagfors, Sweden. Dummy blocks to customer design or provided by us is part of our offer for a perfect run.

Welcome to contact our specialist Peter Ward for further information.

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Dummy Blocks by Uddeholm Machining

The dummy block is the extension of the stem, transmitting force to the billet – over and over again. It needs to expand immediately under load and on return separate from the billet and contract instantly.

What Could Go Wrong?

It is no wonder that dummy blocks wear. The problem is that they often wear too fast, which drives costs for loss of production time and manpower as well as cost for the dummy blocks themselves.

Unassuming as it may appear, the dummy block has a profound impact on quality and productivity. Malfunction causes bad quality in the finished products as well as disruptions, whereas a good dummy block works perfectly throughout the production run and even compensates for e.g. minor misalignments of the press equipment.

Why Uddeholm Machining?

We work closely with our customers to develop and manufacture the perfect dummy block for each application and specific needs. By using an adapter your stem can easily be adjusted to fit our dummy blocks.

Learnings are continuously fed into the process and whether we produce to customers’ design or provide our own, our aim is always to contribute to a hassle-free and efficient production process.

Over the years, we have faced and analyzed most of the problems normally associated with faulty dummy blocks. Let us be your partner in the never-ending search for highest performance and lowest cost per produced unit. By using our expertise you can optimize the process between press and die.

General Steel Programme for Dummy Blocks

General Description

**Uddeholm Tool Steel**

<table>
<thead>
<tr>
<th>Tool Steel</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dievar</td>
<td>A premium Cr-Mo-V hot work steel with good high temperature strength and excellent toughness and ductility in all directions. Recommended in dies and extrusion components where the demands on toughness and ductility are the highest.</td>
</tr>
<tr>
<td>Orvar 2 Microdized</td>
<td>A Cr-Mo-V-alloyed hot work steel with good high temperature strength and good resistance to abrasion. Recommended in most cases for tooling components and dies in aluminium extrusion which come into direct contact with the hot billet.</td>
</tr>
</tbody>
</table>

Chemical Composition and Hardness Selection for Extrusion of Aluminium/Magnesium

<table>
<thead>
<tr>
<th>Uddeholm Tool Steel</th>
<th>AISI</th>
<th>C</th>
<th>Si</th>
<th>Mn</th>
<th>Cr</th>
<th>Mo</th>
<th>V</th>
<th>Hardness (HRC)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dievar</td>
<td>H13 (W. Nr. 1.2344)</td>
<td>0.39</td>
<td>1.0</td>
<td>0.4</td>
<td>5.3</td>
<td>1.3</td>
<td>0.9</td>
<td>46-50</td>
</tr>
<tr>
<td>Orvar 2 Microdized</td>
<td>H13 (W. Nr. 1.2344)</td>
<td>0.35</td>
<td>0.2</td>
<td>0.5</td>
<td>5.0</td>
<td>2.3</td>
<td>0.6</td>
<td>46-52</td>
</tr>
</tbody>
</table>

Uddeholm Analysis Limits Compared to W. Nr. and AISI

Tight limits increase quality and properties of the steel in all aspects and remain good consistency in the production of the parts in the same steel grade.

Since 1668 we have been providing a wide range of innovative cutting-edge solutions for our customers in demanding segments. Our dedicated employees work in almost ninety countries and together we deliver improved competitiveness to clients worldwide. Welcome to Uddeholm, #1 in high performance tool steel.