**Winget Syncro**

**Type J21 Wire Drawing Machine**

for the drawing of non-ferrous metals

The Winget Syncro J21 type, as illustrated, is a combined high-speed breakdown and intermediate wire drawing machine.

**Pullblock Assembly**

The J21 machine has ten double-step pullblocks grouped into six assemblies and up to 21 dies may be used. The first two assemblies each have one double-step pullblock mounted on the drive shaft. The remaining assemblies having two double-step pullblocks. The inner pullblock is mounted on a tubular drive shaft and has a solid shaft passing through it, onto which is mounted the outer pullblock. The large pullblock diameter is 14" (356mm), the smaller 9" (229mm) both are made of high grade chrome steel.

**Wide Finishing Range**

Provision is made for using between 8 and 21 dies by adjusting the speed of the finishing capstan. This is achieved by employing a double-step finishing capstan and a four-speed capstan gearbox giving the possibility of 8 finishing wire speeds.

Specifications for processing copper or aluminium are shown overleaf.
Specification J21 Machine (capstan type)
for the drawing of non-ferrous metals

<table>
<thead>
<tr>
<th>Winget Syncro</th>
<th>Copper</th>
<th>Aluminium</th>
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</thead>
<tbody>
<tr>
<td>Maximum number of dies</td>
<td>21</td>
<td>21</td>
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<tr>
<td>Elongation per die</td>
<td>26%</td>
<td>26%</td>
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<tr>
<td>Area reduction per die</td>
<td>20.65%</td>
<td>20.65%</td>
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<tr>
<td>Maximum entry diameter</td>
<td>5/16”</td>
<td>8mm</td>
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</table>

Finishing diameter range:
- Entry Rod ¼” (6.35mm) 0.020” to 0.128” 0.51mm to 3.25mm 0.025” to 0.128” 0.64mm to 3.25mm
- Entry Rod 5/16” (8mm) 0.025” to 0.128” 0.64mm to 3.25mm 0.025” to 0.128” 0.64mm to 3.25mm

Operating speeds:
- 5,070 fpm 25.7 mps 5,070 fpm 25.7 mps
- 150 hp 150 hp 150 hp 150 hp
- 6 6 6 6

Operating speeds when using large capstan:
- In forward position 5,070 fpm & 3,950 fpm 25.7 mps & 20.1 mps 5,070 fpm & 3,950 fpm 25.7 mps & 20.1 mps
- In rear position 2,050 fpm & 1,680 fpm 10.4 mps & 8.55 mps 2,050 fpm & 1,680 fpm 10.4 mps & 8.55 mps

Operating speeds when using small capstan:
- In forward position 3,280 fpm & 2,550 fpm 16.7 mps & 13.0 mps 3,280 fpm & 2,550 fpm 16.7 mps & 13.0 mps
- In rear position 1,335 fpm & 1,090 fpm 6.8 mps & 5.54 mps 1,335 fpm & 1,090 fpm 6.8 mps & 5.54 mps

Maximum die case accommodated 1¾” dia x 1¼” thick 45mm x 32mm 1¾” dia x 1¼” thick 45mm x 32mm

Required flow of wire drawing lubricant 150 gpm 700 litre /m 100 gpm 450 litre /m

Lubricant pressure 20 psi 1.4 kg/cm² 20 psi 1.4 kg/cm²

Quantity of lubricant required 1,500 gal 7,000 litres 1,000 gal 4,500 litres

Compressed air required to open front cover 2 cu ft at 80 psi 56 litres at 5.6 kg / cm² 2 cu ft at 80 psi 56 litres at 5.6 kg / cm²

Floor space required for motor, gearbox, machine and control panel 22 ft x 10 ft 6.7m x 3m 22 ft x 10 ft 6.7m x 3m

Approximate weight with motor, machine and control panel 31,500 lb 14,300 kg 31,500 lb 14,300 kg

Take-ups and annealers for continuous and co-ordinated operation are available for use with the J21 Type Machine, details of which are available upon request.

Other particular features such as Drive, Machine Oil Lubrication and Wire Drawing Lubrication are fully detailed on Bulletin 1C.

Disclaimer
Whilst we have endeavoured to ensure that the information contained herein is accurate, Winget Syncro and Beaumont Machinery do not accept responsibility for any errors or omissions. This specification is subject to amendment.