

**PROCESS**

# HIGH TENSILE AND WELDING WIRE

## *The Microrolling<sup>®</sup> Mill for aluminium alloys*

Continuous-Properti pursued, with its high precision Microrolling<sup>®</sup> process, an important objective: **to provide a valid alternative to the conventional breakdown (cold drawing) machines.** This technology is very well proven for producing wire in both hot and cold conditions.

The Microrolling<sup>®</sup> process, based on a Monobloc rolling mill with 8-12 rolling stands (each with 3-rolls) and powered by only one motor, really excels with those materials, such as high tensile or welding wire alloys, where the conventional process must be divided into several steps with intermediate annealing.



*Microrolling<sup>®</sup> Mill in operation at Indalco.*

**The advantages of a Microrolling<sup>®</sup> Mill over a traditional system are:**

- Reduced work hardening of the material
- Energy savings

- Higher production rate
- Self-threading (extremely user-friendly)
- Increased safety (self-threading eliminates potential pinch points)
- No pointing required
- No rod shaving required
- Improved wire surface smoothness
- Absence of residual lubricant on wire surface
- Greater reduction between anneals on hard material
- All together: lower production costs

**Typical lay-out (pictured below):**

- 1. DOUBLE ROD 9.5 mm PAY-OFF**
- 2. ROD DANCER**

To ensure the appropriate rod tension prior to entry into the Microrolling<sup>®</sup> Mill.

- 3. MICROROLLING<sup>®</sup> MILL 12 STANDS**

The Microrolling<sup>®</sup> Mill will process the incoming rod, not shaved, from the standard 9.5 mm diameter down to 2.6 or 2.4 mm wire with 12 rolling stands.

The Rolling Sequence is round/triangle/round; each second stand can produce round wire. The maximum exit speed is 25 m/sec.

- 4. WIRE DANCER**

Designed to synchronize the speed between the Microrolling<sup>®</sup> Mill and the dynamic spooler

- 5. DYNAMIC SPOOLER**

To collect approximately 700-1,000 kg of wire depending upon different reel diameters (**can be customized upon request**).

