With QuadrO® products, you can rely on superior engineering and manufacturing quality for maximum uptime and yield. Our products are backed by the highest level of application and technical support, based on more than 40 years of experience.

**SCALABLE LAB SYSTEM (SLS)**
- Ability to alternate between five milling solutions in seconds
- Ultrasmart Detect, a unique lab equipment feature that automatically ensures the appropriate scalable speed range is fixed by recognizing the head being installed
- PSD and capacity scalable with simple operating parameters transfer from small scale SLS tests, to full-scale production machines
- Suitable for dry milling and/or wet material conditioning, as stand-alone or in complement lab scale wet granulation systems
- Process samples as small as 5 grams with minimal loss or product retention, or as large as +100 kg/hr for certain products & models
- 95%+ product recovery

**QUADRO® - world’s leader in uniform size reduction, sieving and deagglomeration**
- Knowledge and problem-solving experience gained through more than 20,000 applications
- Optimized designs for maximized return-on-investment
- Engineered and customized equipment to improve process requirements
- Serving primarily the Pharmaceutical and Food industries
- Continuous innovation ensures market has best and most competitive solutions

**QUADRO® COMIL® US AND US HIGH-EFFICIENCY**
- In-line, spaceless design
- Tight particle granulometry
- Wide range of scalable screens/impellers
- Low heat, fines, dust and overs

**FITZMILL L1A**
- Same process advantages of larger scale FitzMill comminutors - fully scalable
- Available metered feed system (MFS) for complete process repeatability

**QUADRO® FLEXSIFT S5**
- In-line security screener
- High capacity (typical 500 kg/hr)
- Standard deagglomeration spoiler arm

**QUADRO® H5 HIGH ENERGY COMIL®**
- Primarily APIs, fine chemical and cosmetic applications
- Narrow PSDs with 90-10 more on-target
- Integrated feed system for optimized containment and predictability

**SPECIFICATIONS COMIL® U5**
- CAPACITIES 50 g to 150+ kg/hr
- RPM up to 6500
- MOTOR ¾ HP (0.5kW)
- PSDs $d_{50}$ 150-300 µm
  $d_{90}$ 300-2000+ µm

**SPECIFICATIONS FITZMILL L1A**
- CAPACITIES 5 g to 50+ kg/hr
- RPM up to 12800
- MOTOR ¾ HP (0.5kW)
- PSDs $d_{50}$ 20-300 µm
  $d_{90}$ 60-2000 µm

**SPECIFICATIONS FLEXSIFT S5**
- CAPACITIES <125-2500+ kg/hr
- RPM up to 3500
- MOTOR ¾ HP (0.5kW)
- MESH SIZE min 150 µm (100 mesh)
  max 6.4 mm (0.25”)

**SPECIFICATIONS COMIL® H5**
- CAPACITIES <1 kg to 100 kg/hr
- RPM up to 12800
- MOTOR ¾ HP (0.5kW)
- PSDs $d_{50}$ 20-150 µm
  $d_{90}$ 60-300 µm

**MPT GLOBAL LOCATIONS:**
- World Headquarters
- Centers of Excellence

**MPT PHARMA PROCESSING**
Leading Process Equipment Innovation

Dry/Wet Oral Solid Dosage
Material Processing

APIs, Fine Chemical, Cosmetic Fine Grinding

Food, Industrial Material Processing

**MPT PHARMA PROCESSING**

Who We Are

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Dry/Wet Oral Solid Dosage Processing

**QUADRO® H™ HIGH ENERGY COMIL®**
- Identical API, fine chemicals and cosmetics
- Narrow PSDs with 20X<sup>3</sup> more competence
- Optimum performance and containment when integrated with feed system
- OEB 5 (<1 µg/m<sup>3</sup>) containment
- No need for air handling systems
- Easy parameter controls for scaled PSD consistency

**COMIL® H20 HIGH ENERGY COMIL®**
- Optimal particle diameters of solids
- More effective blush finish with less color ingredient

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**FLEXSIFT SECURITY SCREENING**
- High capacity security screening
- Ideal for in-line installations – bulk bag unloading or vacuum conveying
- Available deagglomeration option

**QUADRO® FINE GRIND**
- APIs and fine chemicals
- Product recovery of APIs
- Narrow API PSDs (very tight spans)
- Unmatched particle size controllability
- Product collector fine efficiency of 99.95% over 95% for period
- OEB 5 (<1 µg/m<sup>3</sup>) containment

**COMIL® FINE GRIND**
- API “E”
- API “B”
- API “C”
- API “D”

**FLEXSIFT SECURITY SCREENING**
- High capacity security screening
- Ideal for in-line installations – bulk bag unloading or vacuum conveying
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**APIS, Fine Chemical & Cosmetic Fine Grinding**

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- Deagglomeration option available

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**Food, Industrial Material Processing**

**OVERDRIVEN G SERIES LINE**
- 50% more throughout than conventional mills
- Ideal for high volume, bulk density applications
- Well-suited for heat-sensitive products
- Minimal contact surface area for cleaning
- Often best suited for bulk feeding

**UNDERDRIVEN G SERIES LINE**
- Compact in-line, high capacity
- To comply with sneezestradust generation
- Minimal contact surface area for cleaning
- Optimum performance and containment

**APIS, Fine Chemical & Cosmetic Fine Grinding**
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- Product recovery of APIs
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**COMIL® FINE GRIND**
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**FLEXSIFT SECURITY SCREENING**
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**Common Applications:**
- Heat-sensitive, sticky and difficult materials can be size reduced continuously at a high capacity without excessive front build-up or screen clogging. The Quadro can:
  - Produce free flowing products, crumble paste, fine pastes or dry powders
  - Break through homogenously or in batching and these means to reduce finishing time (bloughs, pancakes, muffins, cakes, floury ingredients and rice mixes).
  - Size reduce for reduction of snack foods (popples, crab-ski, saltwater, chocolate bars, crackers, granola bars, cleaning qip)