### INJECTION MOLDING



HIGH-PERFORMANCE BELT SOLUTIONS FOR INJECTION MOLDING & THERMOFORMING EQUIPMENT





### INDUSTRY LANDSCAPE

IN THE PLASTICS AND COMPOSITES SECTOR, MOLDING MACHINES OPERATE UNDER HIGH PRESSURE, PRECISION TIMING, AND THERMAL STRESS. BELTS ARE USED TO DRIVE HYDRAULIC PUMPS, CONVEYOR FEED SYSTEMS, DOSING UNITS, EJECTORS, AND TEMPERATURE CONTROL COMPONENTS. EVERY INTERRUPTION IMPACTS PRODUCTIVITY, ESPECIALLY IN 24/7 ENVIRONMENTS.

MOVENDIS DEVELOPS BELTS CAPABLE OF HANDLING CYCLIC TORQUE LOADS, OIL EXPOSURE, AND PRECISE SYNCHRONIZATION — ESSENTIAL FOR AUTOMATED MOLDING, THERMOFORMING, AND EXTRUSION LINES. OUR SOLUTIONS SUPPORT HIGH-OUTPUT, LOW-MAINTENANCE OPERATIONS FOR INDUSTRIAL MOLDERS WORLDWIDE.

### APPLICATIONS AREA



#### INJECTION MOLDING MACHINES

DRIVES POWER HYDRAULIC OR ELECTRIC ACTUATION SYSTEMS.

->MOVENDIS BELTS RESIST OIL EXPOSURE AND MECHANICAL CYCLING.

SMOOTH OPERATION MINIMIZES MOLD MISALIGNMENT AND EJECTION FAILURES.



#### THERMOFORMING UNITS

HEATING AND VACUUM-MOLDING OF PLASTICS REQUIRES PRECISE INDEXING MOTION.

TIMING BELTS ENSURE ACCURATE POSITIONING OF FILMS AND MOLDS.

->OUR BELTS OFFER HEAT TOLERANCE AND LOW ELONGATION.



### EXTRUDERS AND DOSING SYSTEMS

BELTS DRIVE DOSING SCREWS, FEEDERS, AND PERIPHERAL SYSTEMS.

->CONSTANT TORQUE HANDLING AND MINIMAL BACKLASH ARE CRITICAL.

## CONVEYOR SYSTEMS FOR FINISHED PARTS

USED TO EVACUATE MOLDED ITEMS AND REDUCE HANDLING TIME.

->MOVENDIS BELTS PROVIDE NON-MARKING, QUIET PART TRANSPORT.



# TECHNICAL HIGHLIGHTS



### TYPICAL FAILURE MODES SOLVED

- OIL SWELLING OR BELT HARDENING → SPECIAL ELASTOMERS PREVENT **DEFORMATION**
- SLIPPAGE UNDER FAST CYCLES → HIGH-FRICTION COATINGS AND REINFORCED TENSION CORDS
- HEAT-INDUCED FATIGUE → THERMO-STABLE BELT LAYERS MAINTAIN SHAPE AND TENSION
- Backlash or misalignment → Timing Precision belts ensure CLEAN MOLD CLOSURE



#### BELT TECHNOLOGIES OFFERED

- TIMING BELTS (PU & RUBBER) FOR PRECISION DRIVE UNITS AND MOTION INDEXING
- RIBBED BELTS SPACE-SAVING AND QUIET FOR COMPACT **AUXILIARIES**
- FLAT BELTS USED IN CONVEYORS AND PART HANDLING SYSTEMS
- · ANTI-OIL WRAPPED BELTS RUGGED DESIGNS FOR HYDRAULIC MOTOR DRIVES



### MOVENDIS SUPPORT FOR OEMS & FACILITIES

- TAILORED BELT DESIGN FOR MACHINE BUILDERS
- · SIMULATION TOOLS TO TEST LOAD CYCLES AND FATIGUE
- SUPPORT FOR MOLDERS IN AUTOMOTIVE, PACKAGING, MEDICAL
- · LOGISTICS HUBS FOR FAST BELT RESUPPLY WORLDWIDE



#### SUSTAINABILITY & LIFECYCLE VALUE

- REDUCED BELT CHANGE FREQUENCY = LOWER DOWNTIME
- ENERGY-EFFICIENT PROFILES HELP REDUCE MACHINE POWER USAGE
- SAFE MATERIALS = OPERATOR AND ENVIRONMENTAL PROTECTION
- DESIGNED FOR CLEAN PRODUCTION ZONES



### WHY MOVENDIS?

- BELTS TESTED FOR DYNAMIC, THERMAL, AND CHEMICAL EXTREMES
- SUPPORT FOR INDUSTRIAL INTEGRATORS AND PLASTIC PROCESSORS
- CO-DEVELOPMENT WITH TOP-TIER MACHINERY OEMS
- TRUSTED PERFORMANCE IN HIGH-CYCLE, HIGH-PRECISION APPLICATIONS

SCAN FOR MORE DETAILS



MOVENDIS KEEPS YOUR MOLDING SYSTEMS PRECISE, PRODUCTIVE, AND PROTECTED — CYCLE AFTER CYCLE.

JOIN US AT .

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