

WSC FLEX TECHNOLOGY

Wheel manufacturing reaches a new level



WE DIDN'T REINVENT THE WHEEL. JUST THE WAY IT IS MADE.



THE MARKET SENSATION: LEIFELD WSC FLEX

The flow forming technology has been embraced across the globe: The LEIFELD WSC Flex goes one step further and revolutionizes the market.

The new machine for manufacturing rims is using a flow forming process, which, for the first time ever, works with inner rollers.

For manufacturers of aluminum wheels, our patented WSC Flex Technology offers far-reaching potential for improving productivity, lowering cost, and thus creating relevant competitive advantages.



Worldwide unique patented

technology for chaotic production of cast aluminum wheels makes automatic product changeover possible in seconds



Flexibility in wheel design

and shapes that were not possible to be manufactured with conventional tools



Significant CO₂ reduction

through state-of-the-art energy saving measures such as recuperation on the main drives

LEIFELD WSC FLEX TECHNOLOGY – HIGHEST FLEXIBILITY WITHOUT TOOLS

MACHINE FEATURES

- + No tooling and no changeover of tools
- + No gas burner is required as preheating the tool after a product change is no longer necessary
- + Independently controllable inner and outer rollers with automatically adjustable axial and radial offset
- + Inner roller with automatic angle adjustment
- + Multi-functional clamping chuck for flexible workpiece holding
- + Three access areas
- + Synchronization via CNC control
- + Offline programming via FlowSpin Software

YOUR BENEFITS

- + Efficiency increase by a minimum of 15 percent
- + Working with High-Mix Low-Volume Manufacturing (HMLV) lot size one can be produced economically
- + up to 10 percent energy savings by reducing the preform temperature
- + Maximum flexibility in wheel design:
 - ✓ possibility to cover up to 7 different wheel sizes (18"-24")
 - ✓ different rim profiles and wheels with completely cylindrical area can be formed
 - ✓ higher strength in the horn area can be reached
- + Increased material strength allows more flexible wheel design and maximum weight savings
- + No product-specific tooling costs in terms of production, storage, maintenance
- + No set-up times



Visit us online and learn more:
www.wsc-flex.com



Our patented LEIFELD WSC Flex Technology works flexibly without tools. The principle resembles throwing pottery. The forming movement of the hands is similar to the axial and radial movements of the inner and outer rollers.

Forming principle similar to pottery:

- ✓ The human brain of a potter is being replaced by CNC Control.
- ✓ The inner hand is being replaced by the inner roller.
- ✓ The outer hand is being replaced by the outer roller.
- ✓ The clay is being replaced by aluminum.

Technical Data	WSC 700/6-1 FLEX	WSC 700/4-1 H FLEX	FVW2412E
Outside diameter min.	410 mm	410 mm	320 mm
Outside diameter max.	720 mm	720 mm	620 mm
Nominal rim diameter min.	18 "	18 "	15 "
Nominal rim diameter max.	24 "	24 "	22 "
Rim width min.	3 "	3 "	3 "
Rim width max.	14 "	14 "	12 "
Workpiece length approx. max.	400 mm	400 mm	350 mm
Work piece mass	18 - 40 kg	18 - 40 kg	15 - 30 kg



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