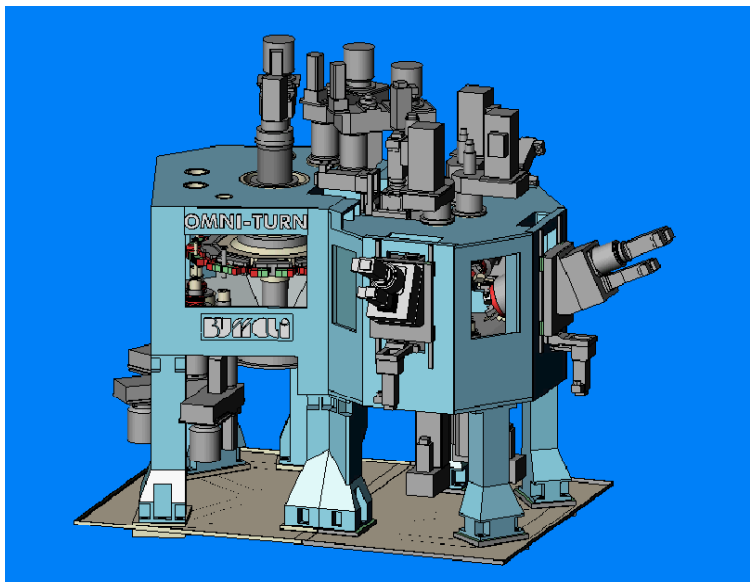
BUFFOLI NORTH AMERICA

http://www.buffoli.com - e-mail: info@buffoli.com

OMNI-TURN-TRANSFER

TRANSFER MACHINES INTEGRATING TURNING CENTERS

BUFFOLI NORTH AMERICA (Booth #5630) takes pride in introducing the very new **OMNI-TURN-TRANSFER**, a patented mill-turning transfer machine designed as complimentary to the **TRANS-BAR** line of multi-spindle static bar turning machines and the existing lines of precision transfer machines, produced since 1961.



The **OMNI-TURN-TRANSFERS** allow manufacturing of precision parts requiring heavy turning operations along with milling operations, angular or transversal drilling, threading, broaching, marking, assembling, gauging, etc. These patented machines solve the challenges of high productivity of complex components while maintaining the versatility and quick change over capabilities necessary for batch manufacturing.

The main characteristic of the **OMNI-TURN-TRANSFERS** is that they integrate multiple rotating part processes in a transfer machine; thus offering the opportunity to finish particularly complex parts.

OMNI-TURN-TRANSFERS combine in one integrated machine

a cell of 3 to 5 vertical lathes

with

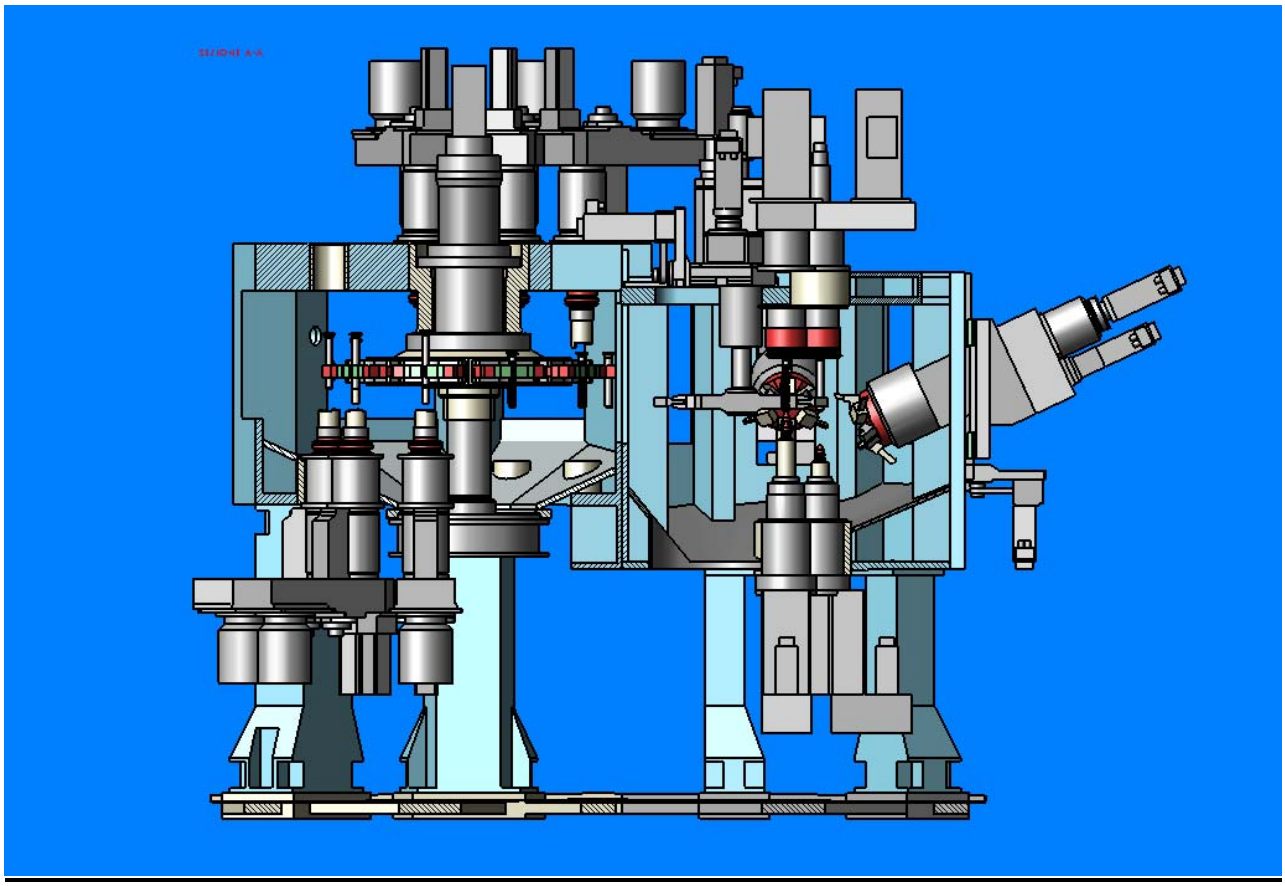
a rotary transfer machine

EXAMPLE OF PARTS

ROTARY TRANSFER
- upper face facing and turning
- lower face facing and turning
- drilling
- off center and transversal machining
- milling

LATHE CELL
precision turning/profiling
in one single clamping

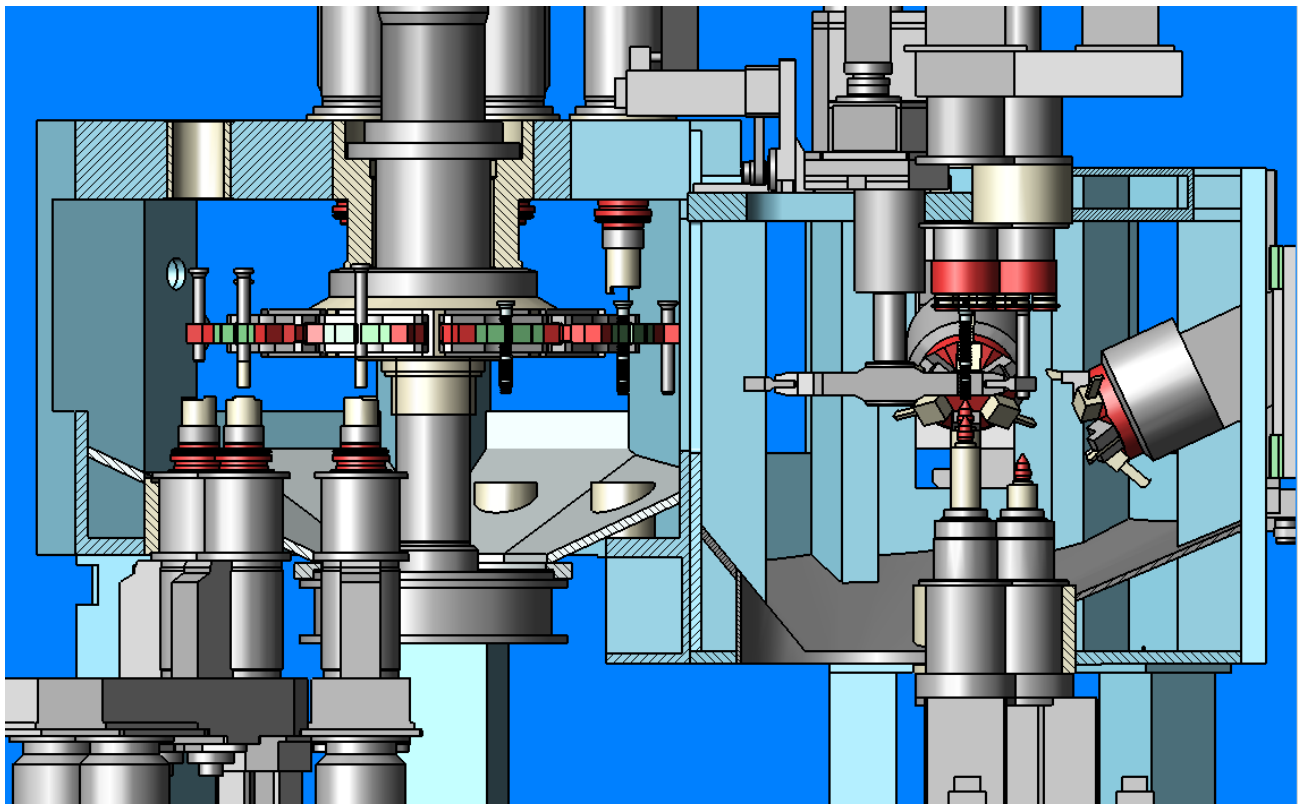
Their innovative configuration optimize part quality and surface finish along with productivity and efficiency. Thus utilizing less factory floor space with less investment.



SECTION "A"

ROTARY TRANSFER
- lower spindles
- upper spindles
- optional radial spindles

LATHE CELL
- 3 to 5 vertical lathes
with revolver turrets (6 to 12 tools)
and optional tailstocks



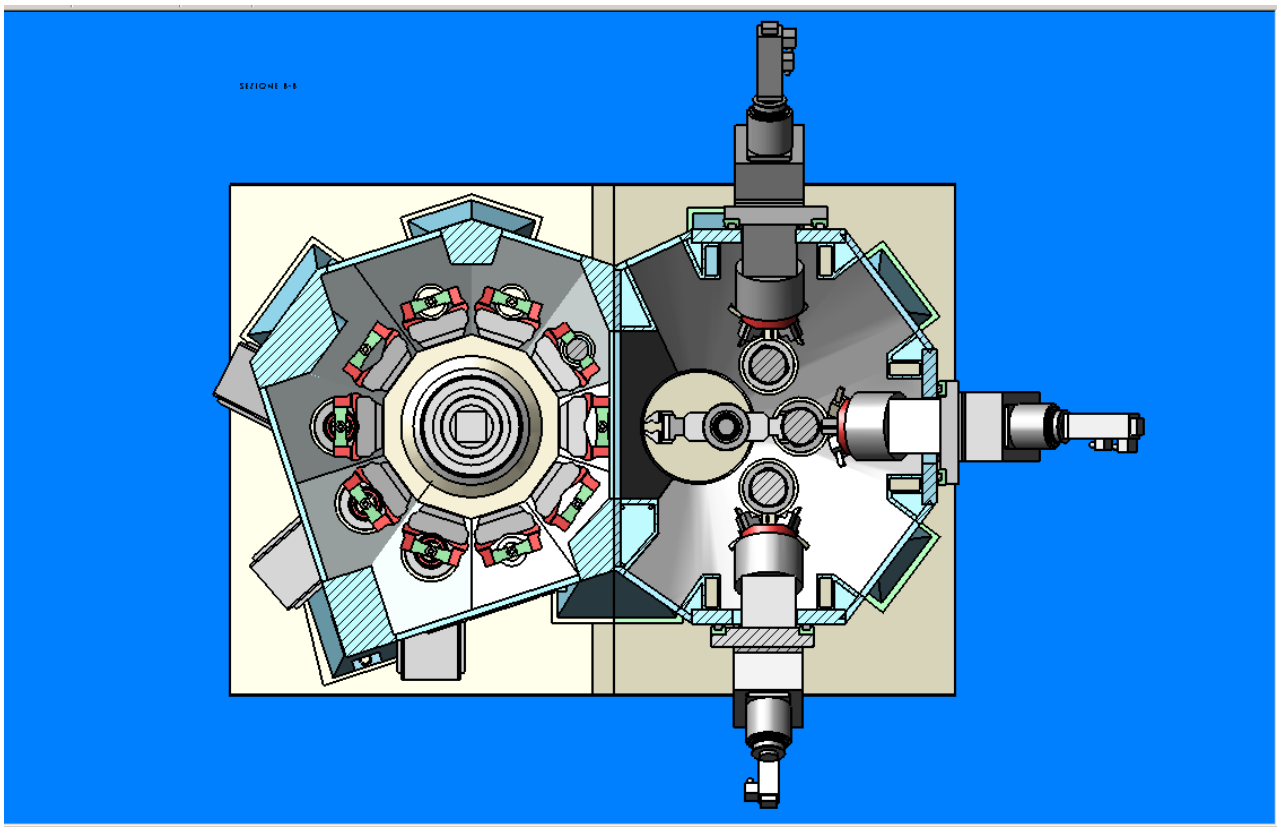
SECTION “A” (DETAIL)

ROTARY TRANSFER
- turning
- drilling
- threading
- milling
- broaching
- marking
- assembling
- gauging...

LATHE CELL
- turning/profiling

with 3 to 5 revolver turrets (6 to 12 tools each)
and optional tailstock

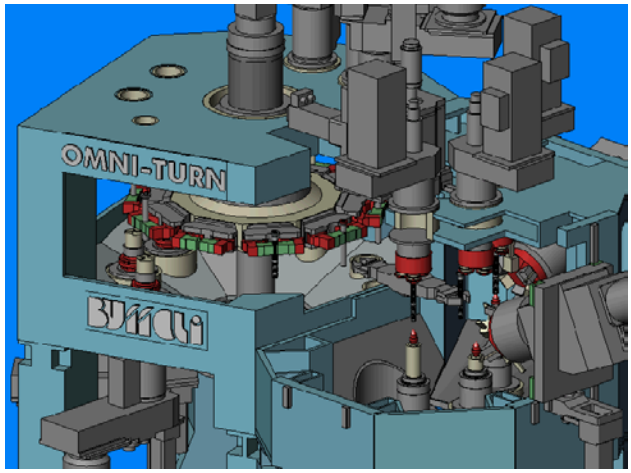
Critical operations are processed in one single clamping and not sequentially as in traditional transfer machines. Several independent lathes allow for the attainment of cycle times shorter than the longest operation. These lathes allow parallel processing while fed alternatively by an internal manipulator. In the meantime the transfer machine area can be used for any previous or subsequent operation, allowing the complete machining of particularly complex parts.



SECTION "B"

ROTARY TRANSFER
different operations
are executed sequentially

LATHE CELL
parallel processing
among the lathes



LATHE AREA

In the lathe area 3 to 5 independent lathes turn and profile the parts in one single clamping with 6 to 12 tools, fixed or motorized.

INTERNAL MANIPULATOR

An internal manipulator loads/unloads each lathe alternatively every time the transfer machine indexes.