



CUSTOM DOWNSTREAM SYSTEMS

MEDICAL

DOWNSTREAM EXTRUSION MACHINERY



In Line
With Your Future



CUSTOM DOWNSTREAM SYSTEMS

MEDICAL

DOWNSTREAM EXTRUSION MACHINERY

Since 1997, CDS has worked with customers in the medical tubing extrusion industry to design and build medical downstream tanks, pullers, and cutting systems.

CDS' Medical Downstream Extrusion Machinery will exceed your expectations, as our engineered solutions are endless. Our machinery can be customized to meet the specialized requirements of the medical tubing industry.

TECHNOLOGY

Customization, flexibility and innovative technology highlight CDS' strengths in the medical extrusion industry for a wide range of applications, from **High Precision Vacuum Sizing Systems, Free Extrusion Water Tanks, High Speed Precision Pulling and Cutting Systems to Full Line Controls and Data Collection Systems.**

MACHINERY

CDS manufactures Medical Downstream Extrusion Machinery in the following categories:

1. Medical Cooling Machines:

High Precision Vacuum Sizing Tanks, Water Cooling Tanks, Free Extrusion Water Tanks, and Multi-Pass Water Cooling Tanks.

2. Medical Pulling Machines:

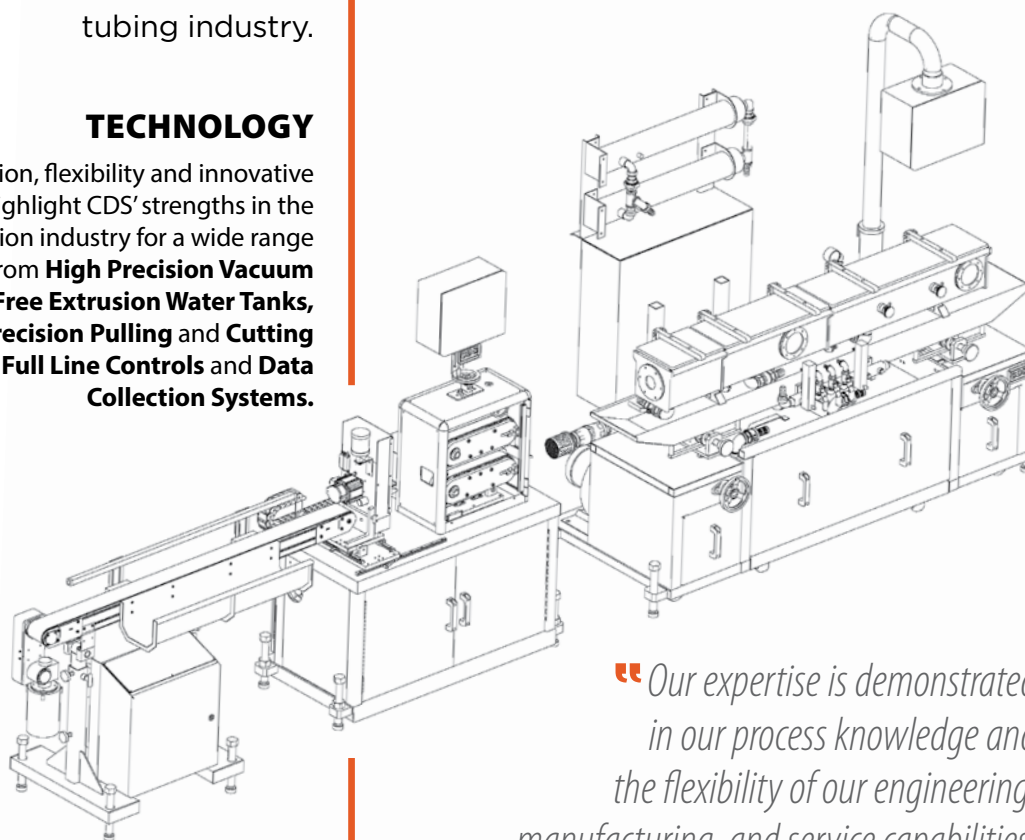
Belt Haul-Offs and Roll Haul-Offs.

3. Medical Combination Units:

Belt Haul-Off / Servo Fly-Knife Cutter.

4. Medical Collection Machines:

Takeaway Conveyors.



“Our expertise is demonstrated in our process knowledge and the flexibility of our engineering, manufacturing, and service capabilities.”

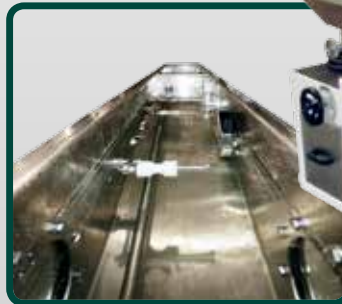


MEDICAL COOLING MACHINES

CDS' Medical Cooling Machines are recognized for their High Precision Vacuum Sizing and Cooling Tanks, uniquely designed to match your specific cooling needs and to provide optimal cooling solutions for a wide range of medical tubing applications.

Value-added options can be incorporated for maximum cooling efficiency.

- Clean room ready
- Medical grade stainless steel components to prevent corrosion
- Easy operator clean out, sterilization, and designed for low maintenance
- 3-axis movement for precise alignment with the extrusion line
- Touch screen controls (HMI)
- Vacuum levels: 0-130 inches of H₂O or 0-200 inches of H₂O



CMPVS6-6

HIGH PRECISION VACUUM SIZING TANKS

CDS' High Precision Tanks are recognized for their vacuum sizing systems with easy clean drawer style water reservoirs that ensure precise vacuum control for single or multilumen microbore heart catheters, and high-gauge medical tubing.



CMPVS8-6



CMPVS Series

Tube Capacity	Micro up to 2"
Tank Length	4' to 26'

*CMPVS: CDS Medical High Precision Vacuum Sizing Tank



MEDICAL **COOLING** MACHINES

WATER COOLING TANKS

CDS' Medical Water Cooling Tanks can be equipped with a closed-loop water recirculation system that separates heated water from cooled process water, accompanied by medical grade stainless steel components.

CMWT Series

Tube Capacity	Micro up to 2"
Tank Length	Up to 30'

*CMWT: CDS Medical Water Cooling Tank



FREE EXTRUSION WATER TANKS

CDS' Free Extrusion Water Tanks offer the operator a precise and repeatable extrusion line setup through a micro-adjustable 3-axis movement.

CMFEWT Series

Tube Capacity	Micro up to 2"
Tank Length	Up to 30'

*CMFEWT: CDS Medical Free Extrusion Water Tank



MEDICAL **COOLING** MACHINES

MULTI-PASS WATER COOLING TANKS

CDS' Medical Multi-Pass Cooling Tanks are equipped with servo driven multi-pass sheaves that circulate the product multiple times within a shorter tank length to minimize their footprint while maximizing cooling capacity.



CMWTM Series

Tube Capacity	Micro up to 0.5"
Number of passes	Up to 5
Tank Length	Up to 26'

*CMWTM: CDS Medical Multi-Pass Water Cooling Tank

CMWTM12-32-20

MEDICAL COOLING OPTIONS

Different tank lengths
Programmable recipes
Air wipe systems
Plate and frame heat exchangers
Dual or single stainless steel basket filter with bypass system
Fine micron filter bags
Customizable vacuum and water manifolds
Water recirculation systems (**)
Servo driven first pass sheave to minimize stretching (*CMWTM)
Additional non-driven sheaves for five pass operation (*CMWTM)
Ultrasonic wall unit mounting
UV water purification system
Loop control heating systems
Heater thermolators
Temperature control
Medical grade stainless steel support frame
Allen-Bradley, Omron, and Siemens packages available (*)
Line Integration: Hard-wired interconnection (analog microprocessor interface, speed signal to measuring device, encoder I/O), Ethernet/IP available
Electrics: 230-460-575VAC / 3PH / 60 Hz, 380-400VAC / 3PH / 50 Hz

(**): All motors are Energy-Efficient

(*CMWTM): Applicable only on Medical Multi-Pass Water Cooling Tank

(*): Other brands available upon request

Note: All of the above machinery complies with UL-CSA-CE



CMPVS8-6



MEDICAL PULLING MACHINES

To accommodate the size and the unique processing requirements of extruded medical tubes, CDS offers its series of Medical Pulling Machines, designed to provide a steady and precise pulling solution.

- Clean room ready
- Consistent pulling speed and torque
- Safe and easy to operate with minimal maintenance requirements.
- Different belt speeds and contact lengths for maximum flexibility
- 0-10VDC, or 4-20 mA Line Integration

STANDARD SPECIFICATIONS:

- Full coverage safety enclosure
- Self-centering conveyor adjustment
- Both belts or pinch rollers driven with timing belt system
- FDA approved non-marking belt or pinch roll material
- Servo motor and drive system
- Touch screen controls ^(HMI)
- Line direction: Right-Left / Left-Right



BELT HAUL-OFFS

CMBH Series

STANDARD FEATURES	CMBH 9.5	CMBH 12	CMBH 18
Conveyor Length	9.5"	12"	18"
Conveyor Width	2", 3", and 4"		
Max. Conveyor Opening	3"		

*CMBH: CDS Medical Belt Haul-Off



CMBH95-2S



MEDICAL **PULLING** MACHINES

ROLL HAUL-OFFS

CMRH Series

STANDARD FEATURES	CMRH 4	CMRH 8
Roll O.D.	4"	8"
Roll Width	2", 3", and 4"	

*CMRH: CDS Medical Roll Haul-Off

MEDICAL PULLING OPTIONS

- Customizable belt or pinch roller configuration
- Servo-motorized clamping control
- Pneumatic self-centering conveyor adjustment
- Direct drive system with servo controls and motors (**)
- Programmable recipes
- Digital belt gap indicator
- Medical grade stainless steel support frame
- Allen-Bradley, Omron, and Siemens packages available (*)
- Line Integration: Hard-wired interconnection (analog microprocessor interface, speed signal to measuring device, encoder I/O), Ethernet/IP available
- Electrics: 230-460-575VAC / 3PH / 60 Hz, 380-400VAC / 3PH / 50 Hz

(**): All motors are Energy-Efficient

(*): Other brands available upon request

Note: All of the above machinery complies with UL-CSA-CE



CMRH2-4SL



MEDICAL COMBINATION UNITS

CDS' Medical Combination Units are recognized for their compact designs, reducing their footprint while combining consistent pulling with clean and precise cutting capabilities. CDS can customize a combination system for any medical tubing application.

STANDARD COMBINATION UNIT SPECIFICATIONS:

- Clean room ready
- Common base construction
- Medical grade stainless steel covers, table top, cutter blade, and bushings
- Fully enclosed for operator safety
- Cut length accuracy $\pm .015$ inch
- Touch screen controls (HMI)
- Both belts driven
- Self-centering conveyor adjustment
- FDA approved non-marking belt material
- Integrated electronic length control
- Adjustable blade speed
- 2-axis stainless steel cutter head movement on precision rails with locking device
- 0-10VDC, or 4-20 mA Line Integration
- Line direction: Right-Left / Left-Right



BELT HAUL-OFF / SERVO FLY-KNIFE CUTTER

CMCBSSK Series			
STANDARD FEATURES	CMCBSSK 9.5	CMCBSSK 12	CMCBSSK 18
Conveyor Length	9.5"	12"	18"
Conveyor Width	2", 3", and 4"		
Max. Conveyor Opening	3"		
Cutting Capacity O.D.	Micro up to 2.5"		

*CMCBSSK: CDS Medical Combination Belt Haul-Off / Servo Fly-Knife Cutter

**BUMP/TAPER
TUBING PACKAGE
AVAILABLE**



Note: Combination Roll Haul-Off / Servo Fly-Knife Cutter available upon request

CMCBSSK2-125



MEDICAL COMBINATION UNITS



**BUMP/TAPER
TUBING PACKAGE
AVAILABLE**



CMCBSSK2-125

MEDICAL COMBINATION UNIT OPTIONS

Customizable belt or pinch roller configuration

Servo-motorized clamping control

Pneumatic self-centering conveyor adjustment

Direct drive system with servo controls and motors (**)

Programmable recipes

Integrated bushing lubrication system

Blade lubrication system with mist or bottle and blade wipe

Blade heating system

Cut-length activating sensor

Additional set of stainless steel cutter bushings

Stop/Cut/Go mode (capable of 2-3 cuts per second)

Bump/Taper tubing package

Digital gap indicator

Medical grade stainless steel support frame

Allen Bradley, Omron, and Siemens packages available (*)

Line Integration: Hard-wired interconnection (analog microprocessor interface, speed signal to measuring device, encoder I/O), Ethernet/IP available

Electrics: 230-460-575VAC / 3PH / 60 Hz, 380-400VAC / 3PH / 50 Hz

(**): All motors are Energy-Efficient

(*): Other brands available upon request

Note: All of the above machinery complies with UL-CSA-CE



MEDICAL COLLECTION MACHINES

CDS offers motorized Takeaway Conveyors that safely collect a wide range of extruded medical tubes. Our durable and reliable Conveying Systems can quickly load material into a collection tray, orienting tubing to facilitate packaging.

TAKEAWAY CONVEYORS

- Medical grade stainless steel collection tray
- FDA approved non-marking conveyor belt material
- Motorized conveyor
- Single axis height adjustment
- Pneumatic part ejector system

CMTC Series

STANDARD FEATURES	CMTC 2	CMTC 4
Conveyor Width	Up to 4"	
Conveyor Length	Up to 14'	

*CMTC: CDS Medical Takeway Conveyor



CMTC4-14



MEDICAL **COLLECTION** MACHINES



CMTC4-14

MEDICAL COLLECTION OPTIONS

Line direction: Right-Left / Left-Right

Customizable conveyor width and length

Discharge controlled by timer or sensor

Dual pneumatic part ejector system

Programmable recipes

Touch screen controls (HMI)

Allen Bradley, Omron, and Siemens packages available (*)

Line Integration: Hard-wired interconnection (analog microprocessor interface, speed signal to measuring device, encoder I/O), Ethernet/IP available

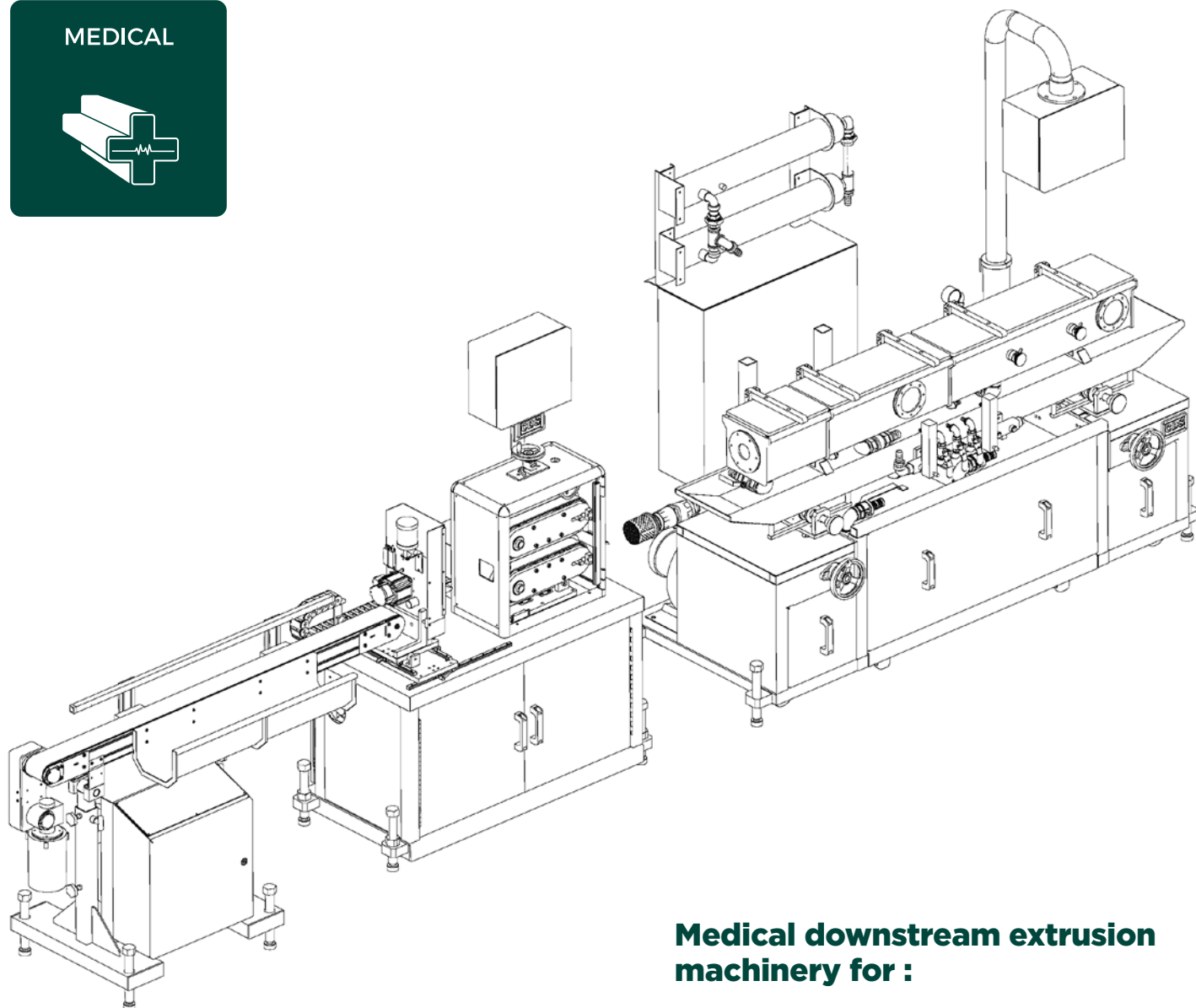
Electrics: 230-460-575VAC / 3PH / 60 Hz, 380-400VAC / 3PH / 50 Hz

(*): Other brands available upon request

Note: All of the above machinery complies with UL-CSA-CE



MEDICAL



Medical downstream extrusion machinery for :

- Single microbore or large medical tubing diameters
- Multilumen microbore medical tubes
- High-tolerance medical tubing
- Bump/Taper tubing



CUSTOM DOWNSTREAM SYSTEMS

1930 52nd Avenue, Lachine (Quebec) H8T 2Y3, Canada
Telephone: 514 633-5933 • Fax: 514 633-5944
info@cdsmachines.com • cdsmachines.com