

# AUTOMOTIVE

DOWNSTREAM EXTRUSION MACHINERY





# **AUTOMOTIVE**

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Since 1997, CDS has been a supplier to the automotive industry, working with customers to build custom downstream machinery.

CDS' Automotive Downstream
Extrusion Machinery will exceed
your expectations, as our
engineered solutions are endless.
Our machinery can process flexible,
semi-flexible, and reinforced
automotive profiles or tubes.

#### **TECHNOLOGY**

Customization, flexibility, and innovative technology highlight CDS' strengths in the automotive extrusion industry for a wide range of applications, from Energy-Efficient and High Precision Vacuum Sizing Systems to High Speed Cutting, and Line Automation.

#### **MACHINERY**

CDS manufactures Automotive Downstream Extrusion Machinery in the following categories:

#### 1. Automotive Cooling Machines:

Vacuum Calibration Tables, High-Precision Vacuum Sizing Tanks, and Water Cooling Tanks.

#### 2. Automotive Pulling Machines:

Belt Haul-Offs and Horizontal Belt Haul-Offs.

#### 3. Automotive Cutting Machines:

Servo Saws, Servo Cutters and Traveling Guillotines.

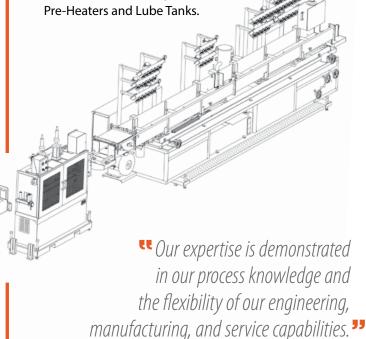
#### 4. Automotive Combination Units:

Belt Haul-Off / Servo Fly-Knife or Servo Rotary Knife Cutter, and Belt Haul-Off / Chop Saw.

#### 5. Automotive Collection Machines:

6. Automotive Auxiliary Machines:

Takeaway Conveyors.





CVC10

## **AUTOMOTIVE COOLING MACHINES**

CDS' Automotive Cooling Machines are recognized for their customized tables and tanks, which provide optimal cooling solutions for different types of flexible to semi-flexible and reinforced automotive profiles and tubes.

#### **CALIBRATION TABLES**

CDS' Vacuum Calibration Tables provide a flexible platform for sizing automotive profiles. The unit's mounting rails can accommodate calibration tooling and an auxiliary tank, both of which can be supplied with controllable vacuum and water cooling.

#### STANDARD SPECIFICATIONS:

- Heavy-duty steel construction
- Pendulum mounted operator panel
- Vacuum and Water manifolds
- 3-axis table movement for precise alignment with the extrusion line
- T-slot mounting rails for calibration tooling or auxiliary tanks
- Line direction: Right-Left / Left-Right

#### VACUUM CALIBRATION TABLES

- Integrated Haul-Off controls
- Motorized longitudinal movement and height adjustment
- Service step

\*CVC: CDS Vacuum Calibration Table

#### **ENERGY-EFFICIENT VACUUM CALIBRATION TABLES**

- Energy saving system
- Touch screen controls (HMI)
- Integrated Haul-Off controls
- Variable pump speed control
- Motorized longitudinal movement and height adjustment
- Service step

\*CVCE: CDS Energy-Efficient Vacuum Calibration Table





## **AUTOMOTIVE COOLING MACHINES**

#### **TANKS**

CDS' Cooling Tanks can be equipped with a closed-loop water recirculation system that minimizes water consumption accompanied by stainless steel components to prevent corrosion and water contamination.

Value-added options can be incorporated to maximize cooling efficiency and production output.

#### STANDARD SPECIFICATIONS:

- Heavy-duty steel construction
- Stainless steel upper tanks and reservoirs
- Water level control
- Pendulum mounted operator panel
- 3-axis precision movement
- Line direction: Right-Left / Left-Right

## HIGH PRECISION VACUUM SIZING TANKS

- Product support rollers with swing arm motion
- Tempered glass lids
- Motorized longitudinal movement
- Touch screen controls (HMI)
- High-efficiency closed loop vacuum control system
- Vacuum levels: 0-130 inches of H<sub>2</sub>O or 0-200 inches of H<sub>2</sub>O

\*CPVS: CDS High Precision Vacuum Sizing Tank

#### WATER COOLING TANKS

- Open upper tank for easy start-up
- Water turbulence bars
- Product support rollers
- Manually adjustable longitudinal movement

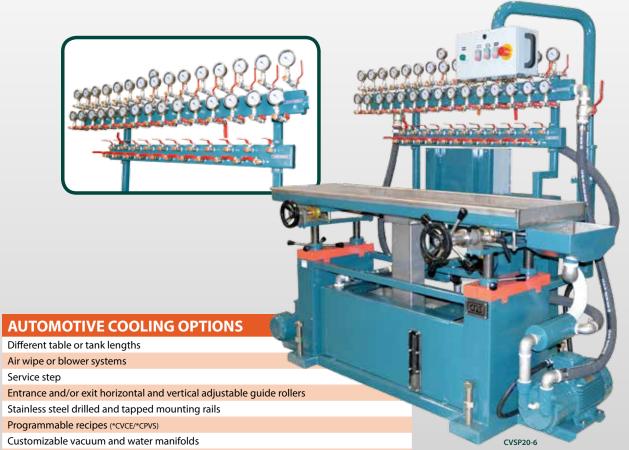
\*CWT: CDS Water Cooling Tank
Note: Spray Cooling Tanks available upon request



CPVS12-16L



## **AUTOMOTIVE COOLING MACHINES**



\*CVSP: CDS Vacuum Sizing Stand Note: Vacuum Sizing Stands available upon request

Vacuum pumps – Dry vacuum (\*\*)

Cyclone systems – Wet vacuum (\*\*) (\*CVC /\*CVCE)

Pump service slides with quick-disconnects

Plate and Frame/Shell and Tube heat exchangers

Differential pressure and temperature gauges

Dual or single stainless steel basket filter with bypass system

Water recirculation systems (\*\*)

UV water purification system

Loop control heating systems

Temperature control

Heavy-duty stainless steel support frame

Motorized longitudinal movement

Angularity adjustment (\*CVCE)

Insulation on tanks and/or all water components

Central greasing system

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

(\*\*): All motors are Energy-Efficient

(\*CVC): Applicable only on Vacuum Calibration Table

(\*CVCE): Applicable only on Energy-Efficient Vacuum Calibration Table

(\*CPVS): Applicable only on High Precision Vacuum Sizing Tank (\*): Other brands available upon request



To accommodate the size and the unique processing requirements of extruded automotive profiles and tubes, CDS offers its series of Automotive Pulling Machines, designed to provide steady and precise traction.

- Consistent pulling speed and torque
- Safe and easy to operate with minimal maintenance requirements
- Conveyor belts that maximize traction while minimizing the distortion of extruded profiles or tubes
- 0-10VDC, or 4-20 mA Line Integration

#### STANDARD SPECIFICATIONS:

- Full coverage safety enclosure
- Heavy-duty steel construction
- Entrance horizontal and vertical adjustable guide rollers
- Both belts driven
- DuraGrip covered belts
- Inline reducer(s)
- Line direction: Right-Left / Left-Right

#### **BELT HAUL-OFFS**

- Manual self-centering conveyor adjustment (Series 9.5 to 18)
- Manual conveyor beam height adjustment
- Timing belt drive system with servo controls (Series 9.5 to 11)
- Timing belt drive system with vector controls (Series 16 to 18)
- Chain drive system with vector controls (Series 25 to 60)



<b>CBH Series</b>									
STANDARD FEATURES	CBH 9.5	CBH 11	CBH 16	CBH 18	CBH 25	CBH 36	CBH 40	CBH 48	CBH 60
Conveyor Length	9.5″	11"	16"	18"	25"	36"	40"	48"	60"
Conveyor Width		2", 3", and 4"				4", 6	5", 8", 10", and	l 12″	
Max. Conveyor Opening		3	3"				7″		



\*CBH: CDS Belt Haul-Off

## **AUTOMOTIVE PULLING MACHINES**

#### HORIZONTAL BELT HAUL-OFFS

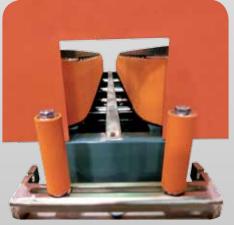
- Self-centering beam adjustment
- Chain drive system with vector controls

CBH-H Series				
STANDARD FEATURES	CBH 25H	CBH 36H	CBH 40H	CBH 48H
Conveyor Length	25"	36"	40"	48"
Conveyor Width:		4", 6",	and 8″	
Max. Conveyor Opening	Up to 7"			

\*CBH-H: CDS Horizontal Belt Haul-Off



CHB60-6HS



CHR60-6HS

#### **AUTOMOTIVE PULLING OPTIONS**

Customizable belt configuration

High temperature belt material

Servo-motorized clamping control with touch screen controls (HMI)

Upper beam with pneumatic clamping control

Pneumatic self-centering beam adjustment

Direct drive system with vector controls and motors (\*\*) (Not applicable on \*CBH Series 9.5 to 18)

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

Horizontal and vertical adjustable guide rollers

Length or Footage counter

Digital belt gap indicator

Forklift slots on frame

Central greasing system

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

(\*\*): All motors are Energy-Efficient (\*): Other brands available upon request



# AUTOMOTIVE CUTTING MACHINES

CDS' Automotive Cutting Machines are designed and manufactured to accurately cut automotive profiles or tubes. The unit's blade cuts in synchronization with the extrusion line speed to achieve cut-to-length precision.

- Fast, accurate cuts for a wide range of customized automotive profiles and tubes
- Servo models increase line speed and cutting accuracy, and provide consistent cutting
- Sturdy construction for straight, clean cuts

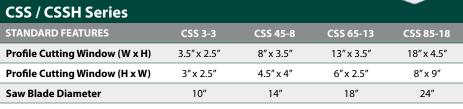
#### STANDARD SERVO SAW SPECIFICATIONS:

- Heavy-duty steel construction
- Servo table travel
- Upward blade cutting (Applicable only on Servo Precision Cut-Off Saws)
- Downward blade cutting (Applicable only on Servo Precision Down-Cut Saws)
- Fully guarded for maximum machine operator safety
- Cut length accuracy ± .015 inch
- Brake motor for quick blade stop
- Integrated electronic length control with encoder
- Touch screen controls (HMI)
- Vacuum Dust/Chip Collector
- Line direction: Right-Left / Left-Right











# EXTRUSION SOLUTIONS CDS . AUTOMOTIVE DOWNSTREAM

## AUTOMOTIVE **CUTTING** MACHINES



CSSD / CSSDH Series				
STANDARD FEATURES	CSSD 3-3	CSSD 45-8	CSSD 65-13	CSSD 85-18
Profile Cutting Window (W x H)	3.5" x 2.5"	8" x 3.5"	13" x 3.5"	18" x 4.5"
Profile Cutting Window (H x W)	3" x 2.5"	4.5" x 4"	6" x 2.5"	8" x 9"
Saw Blade Diameter	10"	14"	18"	24"

\*CSSD: CDS Servo Precision Down-Cut Saw \*CSSDH: CDS High Velocity Servo Precision Down-Cut Saw



## AUTOMOTIVE **CUTTING** MACHINES



#### STANDARD SERVO CUTTER SPECIFICATIONS:

- Heavy-duty steel construction
- Fully guarded for maximum machine operator safety
- Cut length accuracy ± .015 inch
- Flywheel for added cutting torque (Applicable only on Rotary Knife Cutters)
- Lock-down bushings
- Adjustable blade speed
- Blade-holder system driven by heavy-duty servo motor and drive
- Integrated electronic length control with encoder
- Touch screen controls (HMI)
- Line direction: Right-Left / Left-Right

#### **SERVO FLY-KNIFE CUTTERS**

CSFK Series				
STANDARD FEATURES	CSFK 25	CSFK 35	CSFK 45	CSFK 65
Rubber Cutting Window O.D.	2.25"	3.25"	4.25"	6.25"
Bushing O.D.	2.5"	3.5"	4.5"	6.5"
X-axis Travel Movement			12"	

\*CSFK: CDS Servo Fly-Knife Cutter

#### **SERVO ROTARY KNIFE CUTTERS**

CSRK Series		
STANDARD FEATURES	CSRK 45	CSRK 65
Rubber Cutting Window O.D.	4.25"	6.25"
Bushing O.D.	4.5"	6.5"







## **AUTOMOTIVE CUTTING MACHINES**



#### SERVO GUILLOTINE CUTTERS

- Full coverage safety enclosure
- Heavy-duty steel construction
- Pneumatically activated guillotine cutter head
- Servo table travel
- Line direction: Right to Left / Left to Right

\*CGCPS: CDS Servo Guillotine Cutter/Punch

#### **AUTOMOTIVE CUTTING OPTIONS**

Full coverage safety enclosure (Applicable only on Saws)

Vacuum Dust/Chip Collector (Applicable only on Saws)

Variable blade speed (Applicable only on Saws)

Servo controlled vertical blade movement (Applicable only on Saws)

Servo ball screw table travel (Not applicable on \*CSFK/\*CSRK Series)

Soundproofing (Applicable only on Saws)

Product support jig (Applicable only on Saws)

Additional set of cutter bushings (\*CSFK/\*CSRK)

Stainless steel cutter bushings (\*CSFK/\*CSRK)

Quick-change cutter bushings (\*CSFK/\*CSRK)

Stainless steel cutter head (\*CSFK/\*CSRK)

High-torque planetary gearbox (\*CSFK)

12" X-axis travel movement (\*CSRK)

Programmable recipes

Blade lubrication system with mist or bottle and blade wipe

Blade heating system (\*CSFK/\*CSRK)

Heated entrance tunnel (\*CSFK/\*CSRK)

Cut-length activating sensor

Pneumatic table travel

Extended table travel for high speed (\*CGCPS)

Different cutting windows (\*CGCPS)

Central greasing system

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

(\*CSFK): Applicable only on Servo Fly-Knife Cutter

(\*CSRK): Applicable only on Servo Rotary Knife Cutter (\*CGCPS): Applicable only on Servo Guillotine Cutter/Punch (\*): Other brands available on request

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



CGCPS4-12





# AUTOMOTIVE COMBINATION MACHINES

CDS' Automotive Combination Units are recognized for their compact designs, reducing their footprint while meeting high pull forces and precise cutting capabilities. CDS can customize a combination system for any automotive application.

#### STANDARD SPECIFICATIONS:

- Heavy-duty steel common base construction
- Fully enclosed for operator safety
- Cut length accuracy ± .015 inch
- 12" X-axis travel movement
- Touch screen controls (HMI)
- Both belts driven
- Vector closed-loop electrical system with encoder feedback
- Upper and lower beam height adjustment
- Integrated electronic length control with encoder
- 0-10VDC, or 4-20 mA Line Integration
- Line direction: Right-Left / Left-Right



CCBVSK4-35

#### **BELT HAUL-OFF / SERVO FLY-KNIFE CUTTER**

CCBVSK / CCBSS	K Series				
STANDARD FEATURES	CCBVSK 4-25	CCBVSK 4-35	CCBVSK 4-45	CCBVSK 6-35	CCBVSK 6-45
Conveyor Length			25", 36", and 40°	ıı	
Conveyor Width	4"	4"	4"	6"	6"
Cutting Capacity O.D.	2.25"	3.25"	4.25"	3.25"	4.25"

\*CCBVSK: CDS Combination Vector Belt Haul-Off / Servo Fly-Knife Cutter \*CCBSSK: CDS Combination Servo Belt Haul-Off / Servo Fly-Knife Cutter

#### **BELT HAUL-OFF / SERVO ROTARY KNIFE CUTTER**



\*CCBVSRK: CDS Combination Vector Belt Haul-Off / Servo Rotary Knife Cutter
\*CCBSSRK: CDS Combination Servo Belt Haul-Off / Servo Rotary Knife Cutter



CCBVCS25-10

### AUTOMOTIVE COMBINATION UNITS

#### **BELT HAUL-OFF / CHOP SAW**

- Upper and lower beam with manual height adjustment
- Inline reducer(s)
- Downward blade cutting
- Blade driven by AC motor

CCBVCS / CCBSCS Series					
STANDARD FEATURES	CCBVCS 25-10	CCBVCS 36-14			
Conveyor Length	25″	36"			
Cutting Capacity O.D.	3″	4.5"			

<sup>\*</sup>CCBVCS: CDS Combination Belt Haul-Off / Chop Saw \*CCBSCS: CDS Combination Servo Belt Haul-Off / Chop Saw



#### **AUTOMOTIVE COMBINATION UNIT OPTIONS**

Customizable belt configuration

High temperature belt material

Horizontal belt configuration (Not applicable on \*CCBVCS/\*CCBSCS Series)

Upper beam with pneumatic clamping control (Not applicable on Horizontal Combination Series)

Servo-motorized clamping control (Not applicable on Horizontal Combination Series)

Self-centering adjustment (Not applicable on \*CCBVCS/\*CCBSCS Series)

Timing belt drive system

Direct drive system with vector controls and motors (\*\*)

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

Digital belt gap indicator

 $Additional\ set\ of\ cutter\ bushings\ (Not\ applicable\ on\ {\tt *CCBVCS/*CCBSCS}\ Series)$ 

 $Stainless\ steel\ cutter\ bushings\ (Not\ applicable\ on\ {\rm *CCBVCS/*CCBSCS}\ Series)$ 

Quick-change cutter bushings (Not applicable on \*CCBVCS/\*CCBSCS Series)

Stainless steel cutter head (Not applicable on \*CCBVCS/\*CCBSCS Series)

High-torque planetary gearbox (Applicable only on Servo Fly-Knife Cutter Combination Series)

Blade lubrication system with mist or bottle and blade wipe

Blade heating system (Not applicable on \*CCBVCS/\*CCBSCS Series)

Cut-length activating sensor

Adjustable blade speed (\*CCBVCS/\*CCBSCS)

Vacuum Dust/Chip Collector (\*CCBVCS/\*CCBSCS)

Programmable recipes

Central greasing system

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

Horizontal Combination Series: CCBVSK-H, CCBSSK-H, CCBSSRK-H, and CCBVSRK-H Servo Fly-Knife Cutter Combination Series: CCBVSK, CCBVSK-H, CCBSSK, CCBSSK-H (\*CCBVCS): Applicable only on Combination Vector Belt Haul-off / Chop Saw (\*CCBSCS): Applicable only on Combination Servo Belt Haul-off / Chop Saw (\*): Other brands available upon request



# AUTOMOTIVE COLLECTION MACHINES

CDS offers motorized Takeaway Conveyors that safely collect a wide range of extruded automotive profiles and tubes. Our durable and reliable Conveying Systems can quickly load material into a bundling rack or bin for easy pickup.

#### **TAKEAWAY CONVEYORS**

- Heavy-duty steel construction
- Single axis height adjustment
- Motorized conveyor
- Pneumatic part ejector system



CTC Series				
STANDARD FEATURES	CTC 3	CTC 4	CTC 6	CTC 8
Conveyor Length	3"	4"	6"	8″
Cutting Capacity O.D.	Up to 20'			

\*CTC: CDS Takeway Conveyor









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 / 3 PH / 60 Hz, 380-400VAC / 3 PH / 50 Hz

All motors are Energy-Efficient

(\*): Other brands are available upon customer request

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

## AUTOMOTIVE AUXILIARY MACHINES

#### **PRE-HEATERS**

- Heavy-duty steel construction
- Compact stainless steel tunnel design
- Air blower heating system
- Insulated tunnel for heat retention

\*CPHM: CDS Pre-Heating Machine

Note: Infrared (IR) and Radiant Heat Ovens available upon request

#### **LUBE TANKS**

- Heavy-duty steel construction
- Stainless steel upper tank and reservoir
- Lube recirculation system with pump
- Air wipe system

\*CLT: CDS Lube Tank





CLT10-2

#### **AUTOMOTIVE AUXILIARY OPTIONS**

Line direction: Right-Left / Left-Right

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

All motors are Energy-Efficient

(\*): Other brands available upon request



