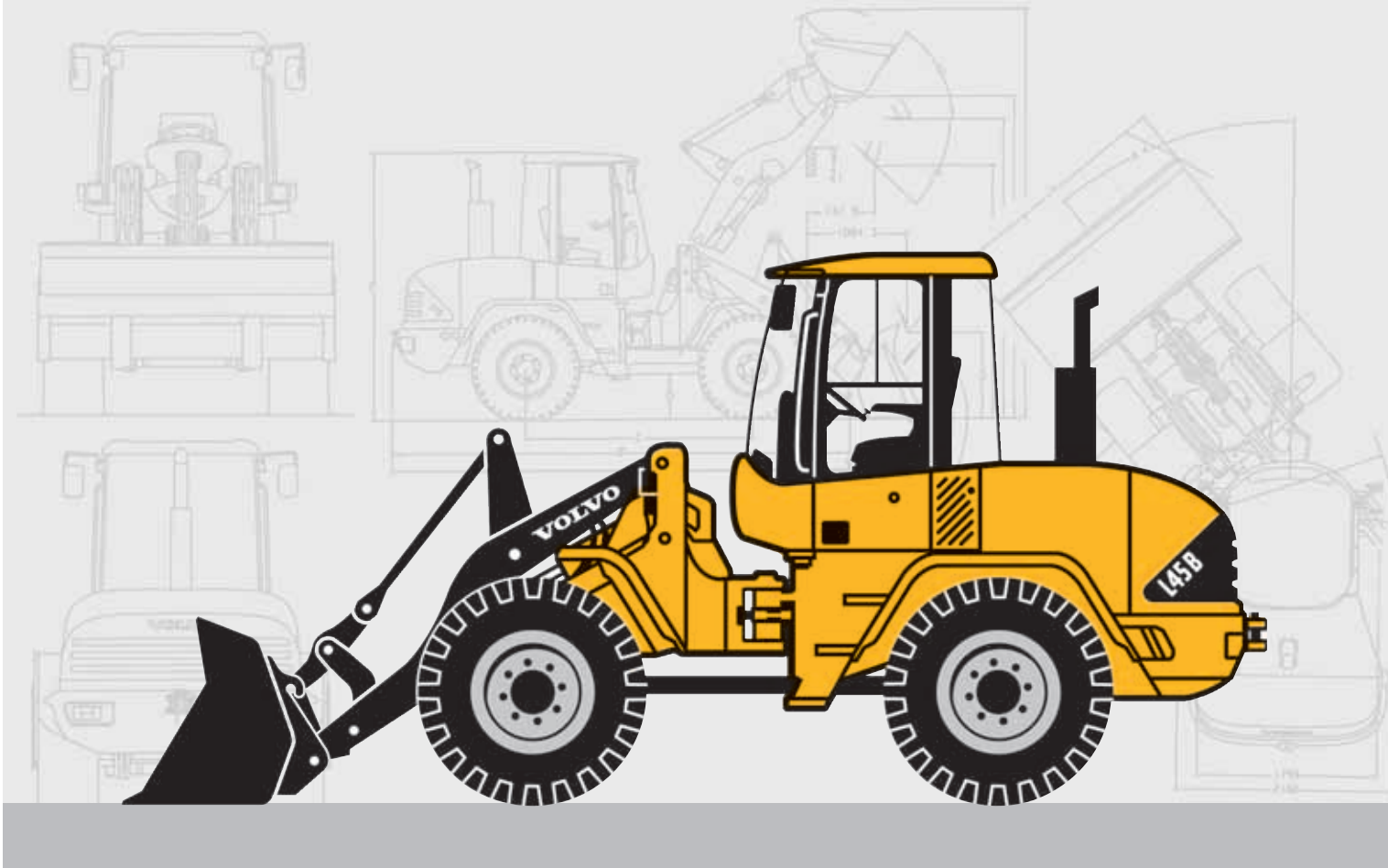


# VOLVO COMPACT WHEEL LOADERS

## L40B, L45B



- **Gross Power :**

- L40B - SAE J1995 71/97 kW/hp
  - L45B - SAE J1995 75/102 kW/hp

- **Net Power :**

- L40B - SAE J1349 69/94 kW/hp
  - L45B - SAE J1349 73/99 kW/hp

- **Operating Weight :**

- L40B - 7,8 - 8,4 t
  - L45B - 8,3 - 8,9 t

- **Bucket Capacities :**

- L40B - 1,2 - 2,0 m<sup>3</sup>
  - L45B - 1,4 - 2,5 m<sup>3</sup>

- **High-performance, low environmental impact diesel engine:** quiet, low emissions, economical fuel consumption.

- **Hydrostatic drive with significant advantages:**

- Easy to operate due to automatic drive facility.
  - Maintains high drawbar pull even when working hydraulics are engaged.
  - Advantageous hydrostatic brakes, wear-free and safe.

- **Strong TP-loader linkage, perfect** for loading fork applications: high breakout and lift forces combine with optimum parallelity of the attachment.

- **Operator-selected 100% differential lock** on both axles to give optimum traction.

- **Standard hydraulic quickchange coupling:**

- Various tried-and-tested attachments for a wide range of applications.

- Purpose designed cab comfort:
  - Multi-function lever.

**MORE CARE. BUILT IN.**



# SPECIFICATIONS

## Engine

Volvo in-line 4-cylinder, 4 stroke, direct injection diesel engine with turbocharging, water cooled. Air cleaning: 1. Pre cleaner with ejector / 2. Paper filter with indicator in cab / 3. Safety filter

	L40B	L45B
<b>Engine</b>	D5DCFE3	D5DCGE3
<b>Gross power @</b>	2200 r/min	2200 r/min
<b>SAE1995</b>	71 kW - 97 hp	75 kW - 102 hp
<b>Net power @</b>	2200 r/min	2200 r/min
<b>SAE1349 - DIN ISO 1585</b>	69 kW - 94 hp	73 kW - 99 hp
<b>Max. torque @</b>	1700 r/min	1700 r/min
<b>SAE1349 net - DIN ISO 1585</b>	400 Nm	420 Nm
<b>Cubic capacity</b>	4.76 l	4.76 l
<b>Bore</b>	108 mm	108 mm
<b>Stroke</b>	130 mm	130 mm

## Electrical system

	L40B	L45B
<b>Rated voltage</b>	24 V	24 V
<b>Battery voltage</b>	2 x 12 V	2 x 12 V
<b>Battery capacity</b>	2 x 74 Ah	2 x 74 Ah
<b>Alternator rating</b>	1540/55 W/A	1540/55 W/A
<b>Starter motor output</b>	4,0 kW	4,0 kW

## Drivetrain

Transmission: hydrostatic transmission, full power shift under load, both when changing direction (forward and reverse) and between ranges. Maximum drawbar force can be achieved in all ranges. Inch/brake pedal for variable machine speed control and power transfer to bucket hydraulics at constant engine rpm. Multi-function lever for change of direction, differential lock and use of the servo-control.

	L40B	L45B
<b>Oscillation at wheel, max.</b>	310 mm	310 mm
<b>Track</b>	1760 mm	1760 mm
<b>Angle of oscillation</b>	±10°	±10°

Tyres:

	L40B	L45B
<b>Size</b>	15.5-25	15.5-25
<b>Rim</b>	12 x 25	12 x 25

Differential locks: hydraulically actuated 100% differential locks in both axles.

Frame: solid front and rear frame, robot-welded. Articulating-oscillating joint for optimum manoeuvrability and traction.

Speed, max:	Standard	High Speed
<b>1st range forward/reverse</b>	6,0 km/h	6,0 km/h
<b>2nd range forward/reverse</b>	20,0 km/h	13,0 km/h
<b>3rd range forward/reverse</b>		35,0 km/h

## Service fill capacities

	L40B	L45B
<b>Engine</b>	14,0 l	14,0 l
<b>Fuel tank</b>	130,0 l	130,0 l
<b>Front axle, total</b>	7,9 l	7,9 l
<b>Rear axle, incl. drop-box</b>	9,9 l	9,9 l
<b>Hydraulic tank, incl. hydraulic system</b>	120,0 l	120,0 l

## Braking system

Service brake: reliable, dual braking system, disc brake hydraulically actuated via pump accumulator, acting upon all four wheels.

1. Wear-free, hydrostatic inching brake / 2. Central disc brake, actuated via «inch/brake pedal». First stage of pedal application actuates the inching facility, the last third of pedal application applies the central disc brake. / 3. High speed version Inch/brake pedal and additional pedal both acting on the oil immersed multi-disk brake.

Parking brake: central disc brake, acting upon all four wheels.

## Hydraulic system

Load sensing hydraulic system with self-controlling power distribution. Thermostatically controlled oil circuit with integrated cooling system. Hydraulic control valve: Servo-controlled, double acting control valve three spool system, with primary and secondary pressure valves.

1. Lifting function / 2. Tilting function / 3. Additional function for hydraulic QC, Unlock, neutral, lock. Preparation for operating hydraulic attachments with this function is available as an option.

Hydraulic oil filter: Combined suction and return-filtration cartridge with a 10 µm filter. The filter can be replaced without emptying the hydraulic oil tank.

Axial piston pump

	L40B	L45B
<b>Flow</b>	106 l/min	106 l/min
<b>@ engine rpm</b>	2100 r/min	2100 r/min
<b>Relief valve pressure</b>	23 MPa	25 MPa

## Steering

Load sensing hydrostatic steering. Central articulating-oscillating joint with damping effect. Steering pump: gear-type pump controlled by priority valve. Steering cylinder: 2 double-acting steering cylinders.

Steering:

	L40B	L45B
<b>Angle of articulation</b>	±40°	±40°

Steering pump:

	L40B	L45B
<b>Flow</b>	43,5 l/min	43,5 l/min
<b>@ engine rpm</b>	2100 r/min	2100 r/min
<b>Relief valve pressure</b>	17 MPa	17 MPa

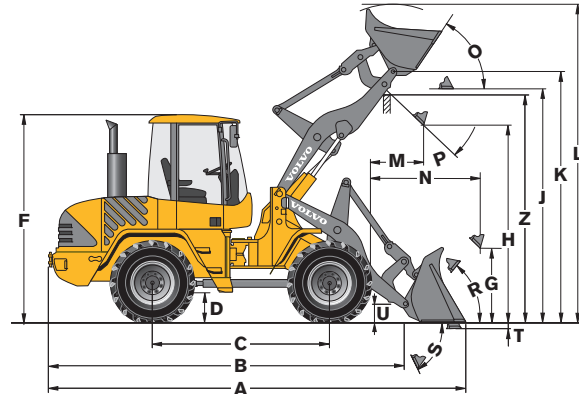
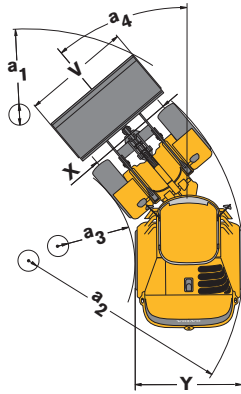
## Linkage

	L40B	L45B
<b>Linkage system</b>	TP	TP
<b>Lift cylinders</b>	2	2
<b>Tilt cylinders</b>	1	1
<b>Lift time (loaded)</b>	6,0 s	6,0 s
<b>Lowering time (empty)</b>	5,0 s	5,0 s
<b>Dump time</b>	1,5 s	1,5 s
<b>Crowd time</b>	1,8 s	1,8 s

## Noise levels

The L40B conforms to the 2006 European Machine Directive Noise Level (2000/14/CE) of 102 dB(A) for this class of machine. The L45B conforms to the 2006 European Machine Directive Noise Level (2000/14/CE) of 102 dB(A) for this class of machine.

# SPECIFICATIONS L40B



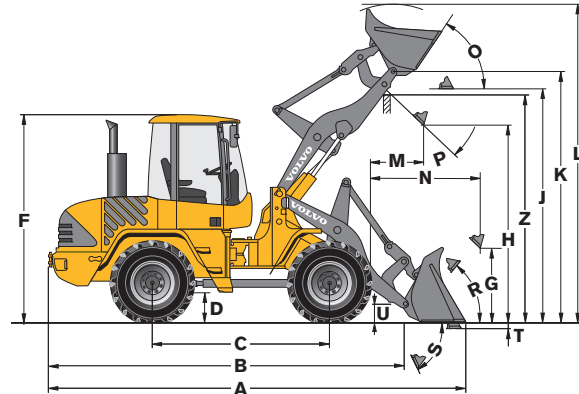
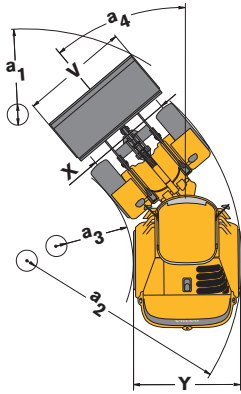
Data according to bucket type		General Purpose		Light Material		4-in-1	High-Tip
L40B with TP-linkage, TPZ attachment carrier and 15.5-25 tyres							
Capacity heaped	m <sup>3</sup>	1,3	1,4	1,6	2,0	1,1	2,0
Material density	kg/m <sup>3</sup>	1800	1600	1400	1100	1900	900
Static tipping load, straight (ISO / DIS)	kg	5450	5400	5300	5150	5150	4500
Static tipping load, full turn 40° (ISO / DIS)	kg	4800	4750	4700	4550	4550	3950
Hydraulic lifting capacity, max.	kN	70,0	69,0	68,0	65,5	67,0	57,0
Breakout force	kN	66,0	62,5	57,5	47,5	70,5	-
A Total length	mm	5795	5835	5910	6050	5740	6400
L Lift height, max.	mm	4490	4550	4620	4740	4510	5490
V Bucket width	mm	2250	2250	2250	2250	2250	2250
a1 Clearance circle	mm	9520	9550	9590	9700	9500	9890
T Digging depth	mm	165	165	165	160	150	155
H Dump height, 45°	mm	2770	2745	2685	2550	2790	4010
M Reach at max. height	mm	800	825	870	995	720	1340
N Reach, max.	mm	1560	1585	1630	1755	1480	2440
Operating weight	kg	7820	7830	7820	7860	8010	8290

L40B with TP-linkage and 15.5-25 tyres	
B	4900 mm
C	2400 mm
D	415 mm
F	2930 mm
G	1080 mm TPZ QC
G	1020 mm TPV QC
J	3300 mm
K	3555 mm
O	57 °
P	45 °
R	50 °
S	68 °
U	255 mm
X	1760 mm
Y	2160 mm
Z	3240 mm TPZ QC
Z	3310 mm TPV QC
a2	4440 mm
a3	2220 mm
a4	±40 °

Data according to bucket type		General Purpose		Light Material		4-in-1	High-Tip
L40B with TP-linkage, TPV attachment carrier and 15.5-25 tyres							
Capacity heaped	m <sup>3</sup>	1,2	1,4	1,6	2,0	1,1	2,0
Material density	kg/m <sup>3</sup>	1900	1600	1400	1100	1900	900
Static tipping load, straight (ISO / DIS)	kg	5250	5200	5150	5000	4950	4200
Static tipping load, full turn 40° (ISO / DIS)	kg	4650	4600	4550	4400	4350	3700
Hydraulic lifting capacity, max.	kN	65,5	64,5	63,5	61,0	61,5	52,0
Breakout force	kN	61,0	56,0	51,5	43,5	60,0	-
A Total length	mm	5850	5930	6000	6190	5860	6530
L Lift height, max.	mm	4520	4610	4680	4810	4540	5580
V Bucket width	mm	2250	2250	2250	2250	2250	2250
a1 Clearance circle	mm	9550	9590	9630	9750	9550	9990
T Digging depth	mm	160	160	160	155	155	170
H Dump height, 45°	mm	2740	2680	2620	2490	2690	4110
M Reach at max. height	mm	845	890	940	1060	805	1435
N Reach, max.	mm	1605	1650	1700	1820	1565	2570
Operating weight	kg	7900	7930	7920	7960	8080	8390

Data with Loading Fork		TPZ	TPV
Centre of gravity 500 mm			
Tipping load, full turn (ISO / DIS)	kg	4050	3750
Payload according to EN 474-3, 60/80%	kg	2400/3200	2250/3000
Payload 80%, transport position, 40° full turn	kg	4000	3700

# SPECIFICATIONS L45B



Data according to bucket type		General Purpose		Light Material		4-in-1	High-Tip
L45B with TP-linkage, TPZ attachment carrier and 15.5-25 tyres							
Capacity heaped	m <sup>3</sup>	1,5	1,6	2,0	2,5	1,3	2,3
Material density	kg/m <sup>3</sup>	1800	1600	1300	900	1900	1000
Static tipping load, straight (ISO / DIS)	kg	6200	6100	5900	5750	5800	5250
Static tipping load, full turn 40° (ISO / DIS)	kg	5500	5400	5250	5100	5100	4650
Hydraulic lifting capacity, max.	kN	77,0	75,5	73,5	71,5	72,5	64,5
Breakout force	kN	66,0	63,0	49,5	43,5	60,5	-
A Total length	mm	6000	6040	6230	6380	6080	6530
L Lift height, max.	mm	4690	4725	4840	5050	4560	5710
V Bucket width	mm	2250	2250	2250	2250	2250	2250
a1 Clearance circle	mm	9735	9760	9880	9980	9780	10080
T Digging depth	mm	200	200	195	195	190	195
H Dump height, 45°	mm	2810	2780	2645	2535	2735	4110
M Reach at max. height	mm	830	860	990	1085	860	1330
N Reach, max.	mm	1650	1675	1805	1900	1675	2490
Operating weight	kg	8330	8360	8340	8440	8510	8810

L45B with TP-linkage and 15.5-25 tyres	
B	5030 mm
C	2450 mm
D	410 mm
F	2930 mm
G	1030 mm TPZ QC
G	970 mm TPV QC
J	3395 mm
K	3650 mm
O	57 °
P	45 °
R	50 °
S	68 °
U	255 mm
X	1760 mm
Y	2160 mm
Z	3330 mm TPZ QC
Z	3400 mm TPV QC
a2	4520 mm
a3	2270 mm
a4	±40°

Data according to bucket type		General Purpose		Light Material		4-in-1	High-Tip
L45B with TP-linkage, TPV attachment carrier and 15.5-25 tyres							
Capacity heaped	m <sup>3</sup>	1,4	1,6	2,0	2,5	1,2	2,3
Material density	kg/m <sup>3</sup>	1800	1600	1200	900	1900	900
Static tipping load, straight (ISO / DIS)	kg	5900	5800	5650	5500	5500	4900
Static tipping load, full turn 40° (ISO / DIS)	kg	5250	5150	5000	4850	4850	4350
Hydraulic lifting capacity, max.	kN	72,6	71,2	69,5	67,5	67,5	60,0
Breakout force	kN	62,0	57,3	48,1	42,8	53,5	-
A Total length	mm	6060	6130	6320	6470	6210	6660
L Lift height, max.	mm	4700	4770	4900	5110	4620	6170
V Bucket width	mm	2250	2250	2250	2250	2250	2250
a1 Clearance circle	mm	9770	9820	9940	10040	9860	10100
T Digging depth	mm	200	200	190	190	195	210
H Dump height, 45°	mm	2780	2720	2580	2470	2640	4190
M Reach at max. height	mm	895	935	1060	1160	940	1430
N Reach, max.	mm	1710	1750	1875	1975	1760	2620
Operating weight	kg	8400	8450	8430	8520	8620	8910

Data with Loading Fork		TPZ	TPV
Centre of gravity 500 mm			
Tipping load, full turn (ISO / DIS)	kg	4630	4375
Payload according to EN 474-3, 60/80%	kg	2750/3700	2625/3500
Payload 80%, transport position, 40° full turn	kg	4000	4000

## STANDARD EQUIPMENT

### Engine

Diesel engine, direct fuel injection  
Extra fuel filter  
Cold start aid  
Dry-type air filter

### Electrical system

Alternator 55 A

### Lighting:

Main head lights (halogen)  
full/dipped/asymmetrical  
Working lights (2 front/1 rear right)  
Parking lights  
Rear lights  
Brake lights  
Direction indicators  
Hazard warning lights  
Reversing lights  
Cab lighting

### Instrumentation & controls:

Multi-function lever  
24 Volt accessories socket  
Horn  
Hazard warning switch  
Safety start

### Electronic Information System:

Analog LED-information for:  
Fuel level  
Engine temperature  
Drive system oil temperature  
LED-illuminated symbols (colour-coded) for:  
Direction (forward/reverse)  
Indicators (left/right)  
Pre-heater  
Main beam  
Differential locks  
Boom arm suspension system (option)  
Loading fork operation (option)

LED-illuminated symbols (red) with acoustic signal for:

Parking brake  
Air filter restriction  
Drive system oil temperature  
Engine temperature  
Engine oil pressure  
Battery charging  
Return filter  
Touch pad with symbols and integrated LEDs for:

Parking lights  
Working lights (front/rear)  
Windscreen wiper (rear)  
Rotating beacon (option)  
Boom arm suspension system on/off (option)  
Locking and activation of Volvo-attachment carrier (option)  
Activation of multi-function lever for directional change  
Digital LED display activated by dual function keys for:  
Entry and retrieval of operating information  
Anti-theft function control

### Drivetrain

Hydrostatic drive  
Operator-selected 100% differential locks  
Tyres 15.5-25

### Hydraulic system

Load-Sensing Hydraulics  
Axial piston pump  
Control valve three-spool system  
3rd hydraulic circuit

### Cab, Exterior

ROPS/FOPS-cab with flexible mountings  
Walk-through cab  
Lockable doors  
All-round tinted safety glass  
Windscreen wiper (front/rear)  
Windscreen washer (front/rear)

Sliding window in the left door  
Door stops  
External rear view mirrors (right/left).

### Cab, Interior

4-way adjustable operator's seat  
Adjustable steering column  
Seat belt  
Sunvisor  
Heater with air-filter and defroster (front/rear)  
Cab ventilation  
Preparation for an optional airconditioner  
Storage box in the cab

### Working Equipment

Automatic bucket leveller  
Hydraulic quick-change attachment carrier

### Carriage Body

Fenders and mudguards, (front/rear)  
Lockable engine hood  
Lockable fuel-tank cap  
Vertical exhaust  
Towing device  
Lifting eyes

### International Standards for Machines and Production

Quality: DIN/ISO 9001  
Safety: CE - Criteron  
Machine guide-lines 98/37/EC  
ROPS ISO 3471  
FOPS ISO 3449  
Operating weight ISO 7131  
Tipping load / Payload: ISO/DIS 14397-1  
EMV (Electromagnetic Compatibility) 89/336/EEC plus supplement  
Environment: DIN/ISO 14001  
Sound regulation: 2000/14/EC

## OPTIONAL EQUIPMENT

### Engine Equipment

Pre-heater  
Pre cleaner air filter (Turbo II)  
Oilbath air filter  
Exhaust particle filter

### Hydraulics

Hydraulic couplings for  
3rd hydraulic circuit  
4th hydraulic circuit

### Cab

Handthrottle  
Hand control inch valve  
Airconditioner  
Radio  
Working light (1 rear, left)  
Air suspension operator's seat

### Working Equipment

Boom arm suspension system  
Attachment carrier TPV

### Environment

Biodegradable hydraulic oil  
Low-noise kit

### Safety

Anti-theft system  
Protective guards for:  
Main head lights  
Working lights  
Rear lights  
Rotating beacon  
Audible reverse alarm



Volvo Construction Equipment is different. It's designed, built and supported in a different way. That difference comes from an engineering heritage of over 170 years. A heritage of thinking first about the people who actually use the machines. About how to help them be safer, more comfortable, more productive. About the environment we all share. The result of that thinking is a growing range of machines and a global support network dedicated to helping you do more. People around the world are proud to use Volvo. And we're proud of what makes Volvo different – **More care. Built in.**



*All products are not available in all markets. Under our policy of continuous improvement, we reserve the right to change specifications and design without prior notice. The illustrations do not necessarily show the standard version of the machine.*

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Ref No. 21 3 430 5594  
Printed in PDF  
Volvo, Belley

English  
2008.03  
CWL