

# Atlas Copco LMP/LTP nutrunners

Get the run-down on our twin-motor concept!



Atlas Copco

*Available in stall and shut-off versions, our LMP 51/LTP 51 pneumatic pistol-grip nutrunners are compact, light, reliable, operator-friendly – and fast! Our patented twin-motor concept ensures perfect tightening results and an unsurpassed power-to-weight ratio. Compared with single-motor units, our twin-motor concept slashes tightening times by up to 60%!*

#### **Classic concept/high-tech application**

Ever changed a wheel? Two-speed tightening – spin the wrench then tighten slowly – is not new. But doing it at high speed, to precisely the same predetermined torque setting, every time? The principle is the same, but LMP 51/LTP 51 twin-motor technology provides a quantum leap in flexibility and performance. A high-speed motor for rapid, smooth run-down, and a low-speed high-torque motor for precision tightening.

#### **Fast on the draw, easy on the wrist**

A genuine “hand-held” power tool, the LMP 51/LTP 51 nutrunner family features an ergonomically optimised rubber pistol grip and trigger action for maximum operator comfort. A true shopfloor “peacemaker”, SuperTwin speed and precision boosts productivity and reduces operator strain and stress.



#### **We make ergonomic sense**

Ergonomic excellence is integral to the design of all our hand-held power tools. Deceptively light, LMP 51/LTP 51 nutrunners possess an exceptional power-to-weight ratio, steplessly generating anything from 60 to 4100 Nm of torque. Compact design, optimal balance and a 360° multi-adjustable torque-reaction bar ensure that any strain on wrist and arm is kept to a minimum. Noise and vibration levels are exceptionally low, and operator comfort is further enhanced by piping exhaust air through the pistol grip.

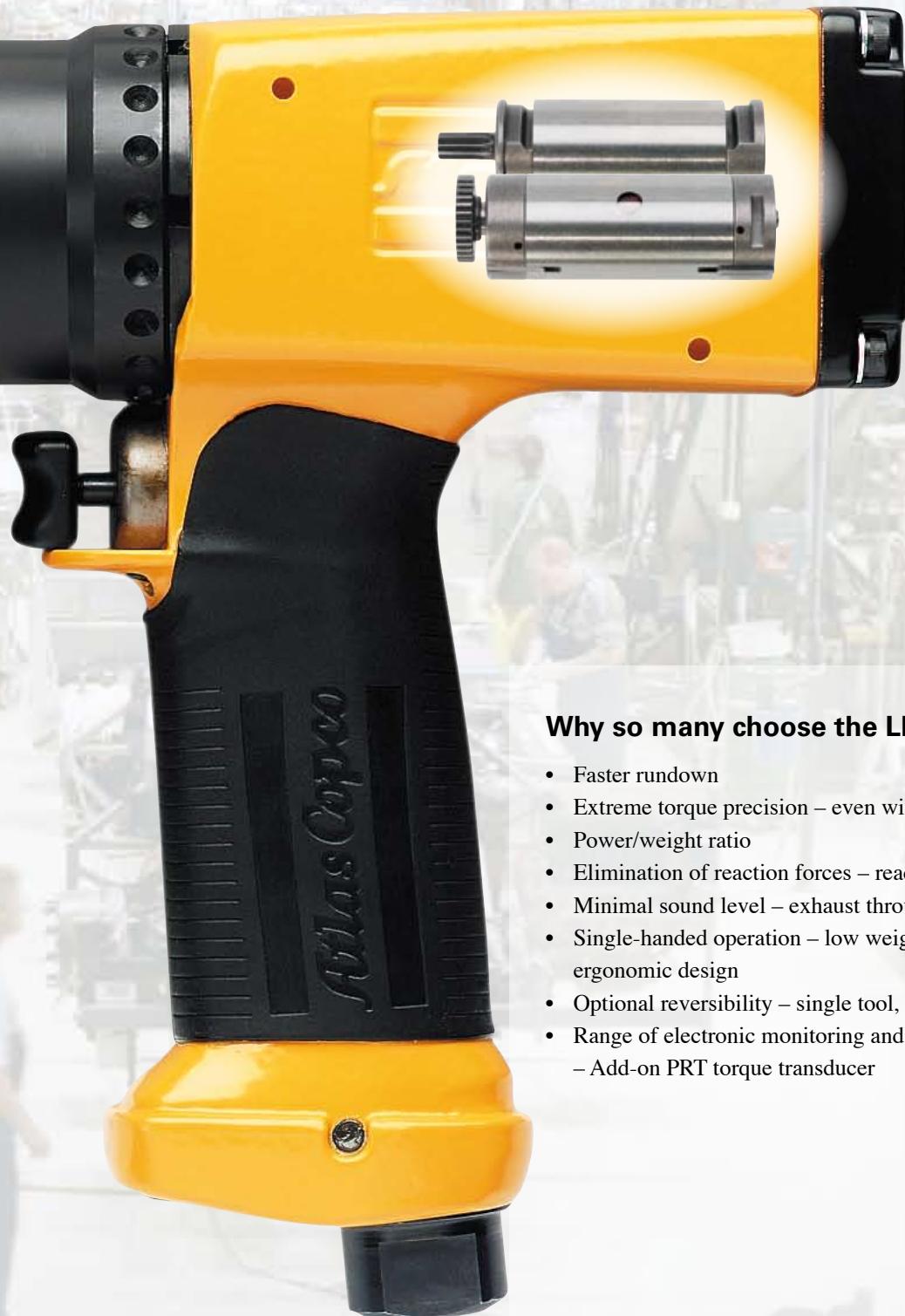


#### **Safety first**

- All reversible nutrunners incorporate a safety device to prevent unintentional change in rotation during use.
- Reversing requires the use of both hands, removing them from the risk zone.
- On releasing the mantel grip, the tool returns to neutral (no shaft rotation).

## Twin motors for accelerated productivity

The perfect pistol-grip nutrunner must provide fast rundown and careful precision tightening. Not easy. Our solution: a motor for each process. Simple in concept, tricky in execution. But we've done it – lighter, more powerful and more compact than a single-motor unit. Our patented twin-motor concept.



### Why so many choose the LMP 51/LTP 51

- Faster rundown
- Extreme torque precision – even with soft joints
- Power/weight ratio
- Elimination of reaction forces – reaction bar
- Minimal sound level – exhaust through handle
- Single-handed operation – low weight, well balanced, ergonomic design
- Optional reversibility – single tool, multiple applications
- Range of electronic monitoring and control options:
  - Add-on PRT torque transducer



## So what's in a name?

The name Atlas Copco Tools & Assembly Systems is synonymous with quality. Our products not only do the job: they do it better, faster, with greater precision and improved operator comfort. Our name stands for innovative technology, proven reliability, serviceability, the flexibility of modular design – and global support. And our commitment to customers is legendary – we make your business our business!

## Automotive

As an automaker, Daimler Chrysler offers a winning mix of German reliability and American marketing flair. And its trucks are built to last. Part of the secret of the company's high productivity lies in its choice of power tools – it has purchased 200 LTP 51 nutrunners since 2000. Why Atlas Copco? Twin spin, high speed and high reliability. Daimler Chrysler likes to keep to a "tight" schedule!

## Energy

Effective tightening (or loosening) of screws and bolts is not front-page news. Which is just the way our customers like it. When it comes to industrial safety, no news is good news. Maintaining a gas (methane) pipeline that runs the length of Italy can be a demanding and sometimes stressful job. Exposed to corrosion due to climate conditions and wear, valves must be regularly serviced, opened and closed. And in emergencies, fast means safe. When our client Snam Rele Gas Italia Spa swapped its wrenches for 74 reversible LMP 51 nutrunners, valve opening and closing times were slashed from 25 to 3 minutes! Specially designed adjustable reaction bars minimise operator load, while air lubricators and regulators ensure top performance. Higher productivity, satisfied employees. The sort of front-page news our clients like!

## Contracting equipment

Contractors worldwide rely on the consistent functionality, flexibility and reliability of Volvo's big yellow dumpers, wheel loaders and excavators. And Volvo relies on our LTP 51 nutrunners, for precisely the same reasons: consistent functionality, flexibility and reliability. If you're moving mountains, you need to run a tight operation. Our LTP/LMP power tools are one of the reasons Volvo's contracting equipment is found at the biggest projects: we run a tight operation too!



## Smart nutrunners

To satisfy increasingly stringent quality assurance demands, many customers complement LMP 51/LTP 51 performance with monitored tightening.

Both "stall" and "shut-off" versions can be equipped with torque transducers and angle encoders to confirm torque and angle. Signal lights confirm achieved torque levels, while the angle encoder detects joint/friction variations and assembly faults.

## Extended range of applications

Those who seek maximum flexibility can link their LMP 51/LTP 51 nutrunners to an Atlas Copco FOCUS 2000 controller. This permits presetting of up to 15 different parameter sets for each tool, using a socket tray or turn selector. One tool – up to 15 torque settings.

And the FOCUS 2000 system is able to generate full tightening documentation, providing comprehensive performance data for in-factory ISO 9000 certification programmes.

## "Straight" version for production lines

LMP 51/LTP 51 nutrunners can also be ordered in "straight" versions for permanent installation on a production line, as single or multi-spindle units. A cost efficient industrial alternative, eliminating the torque reaction bar.

## RE-Controller – the easy and cost effective way to ensure quality

The RE-Controller helps the operator to control the assembly process when using a pneumatic assembly tool of RE-type (reporting). It counts all correct tightenings in a batch and detects premature shut-off, re-hits, stripped threads, wrong screw length and pressure fluctuations.

On an assembly line it is also possible to use it as a process line control unit which ensures that no errors will pass on to the next station.





### "Stall" or "shut-off"?

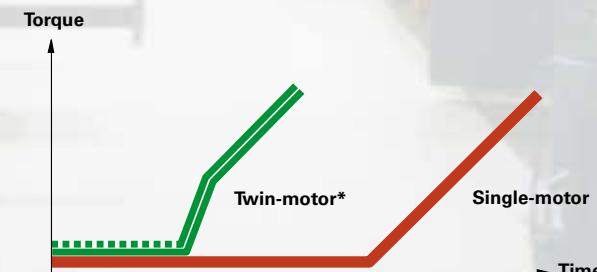
Speed and precision are not always compatible. A fast tool may mean fast run-down, but may transfer too much energy before stopping, causing torque overshoot. A slower tool may be more precise, but can slow productivity. The sensor-controlled twin nutrunner offers the best of both worlds, combining high-speed rundown with low-speed precision. It is available in two main versions, offering different levels of control.

The LMP 51 is a "stall-type" version, providing the operator with maximum manual control over the tightening process. Tightening continues until the nutrunner stalls, or until the operator releases the trigger.

The LTP 51 is an "air shut-off type" nutrunner, featuring a fast, powerful built-in valve that shuts off power when the screw achieves the precise preset torque, even with soft joints. The LTP 51 is especially popular with the automotive and aerospace industries, where extreme precision is at a premium. Elimination of operator error and uncertainty also promotes significant productivity gains.



Turn to our secret of  
increased productivity...



\*Run-down speed is 3 – 4 times higher compared with a single-motor nutrunner.

## TECHNICAL DATA – LTP

Model	Suitable for bolt size	Square drive size	Torque range at 5 bar				Min torque at 3 bar		Max torque at 6.3 bar		Free speed r/min	Weight		Distance centre to side mm	Air con- sumption at free speed l/s cfm	Ordering No.	
			Nm	ft lb	Nm	ft lb	Nm	ft lb	Nm	ft lb		kg	lb				
<b>Pistol Grip nutrunners, torque control type, reversible</b>																	
LTP51 HR008-13	M14	1/2	150	110	85	60	70	50	175	130	550	3.0	6.6	238	30	19 40	8431 0527 15
LTP51 HR004-20	M18	3/4	270	200	200	145	145	105	320	235	255	3.9	8.6	275	34	19 40	8431 0527 31
LTP51 HR002-20	M20	3/4	380	280	265	195	220	160	460	235	175	3.9	8.6	275	34	19 40	8431 0527 49
LTP51 HR0014-25	M22	1	530	390	285	280	280	207	680	503	135	4.8	9.5	305	34	19 40	8431 0527 25
LTP51 HR001-25	M24	1	700	510	450	330	300	220	900	660	100	4.3	9.5	305	34	19 40	8431 0527 21
LTP51P HR005-25	M27	1	805	590	595	435	450	330	950	695	42	4.3	9.5	305	34	19 40	8431 0527 39
LTP51 HR0007-25	M30	1	1100	810	740	545	700	440	1500	1030	55	6.6	14.6	345	42	19 40	8431 0527 53
LTP51 HR0005-38	M30	1 1/2	1500	1080	1000	720	800	576	2000	1440	45	13.8	30.4	380	68	19 40	8431 0527 55
LTP51 HR0004-38	M36	1 1/2	2200	1584	1500	1080	1200	864	3000	2160	30	13.8	30.4	380	68	19 40	8431 0527 58
LTP51 HR0003-38	M42	1 1/2	3000	2160	2000	1440	1600	1152	4000	2880	25	13.8	30.4	380	68	19 40	8431 0527 60
<b>Pistol Grip nutrunners – Torque control type, non reversible</b>																	
LTP51 H012-13	M12	1/2	85	65	60	45	45	35	100	75	900	2.6	5.7	223	29	19 40	8431 0500 07
LTP51 H008-13	M14	1/2	150	110	85	60	70	50	175	130	550	2.6	5.7	223	29	19 40	8431 0500 15
LTP51 H006-19	M16	3/4	185	135	120	85	85	60	225	165	400	2.6	5.7	223	29	19 40	8431 0513 77
LTP51 H004-20	M18	3/4	270	200	200	145	145	105	320	235	255	3.3	7.3	260	31	19 40	8431 0500 31
LTP51 H002-20	M20	3/4	380	280	265	195	220	160	460	335	175	3.3	7.3	260	31	19 40	8431 0500 49
LTP51 H001-25	M24	1	700	510	450	330	300	220	900	660	100	3.6	7.9	282	32	19 40	8431 0502 21
LTP51 H0007-25	M30	1	1100	810	740	545	700	440	1500	1030	55	6.5	14.3	323	42	19 40	8431 0500 53
LTP51 H0005-38	M30	1 1/2	2100	1512	1000	720	800	576	2000	1440	45	13.8	30.4	380	68	19 40	8431 0500 58
LTP51 H0004-38	M36	1 1/2	3000	2160	1500	1080	1200	864	3000	2160	30	13.8	30.4	380	68	19 40	8431 0500 60
LTP51 H0003-38	M42	1 1/2	4100	2952	2000	1440	1600	1152	4000	2880	25	13.8	30.4	380	68	19 40	8431 0500 63
LTP51 PH005-13 <sup>a</sup>	M12	1/2	90	65	65	45	50	35	110	80	380	2.6	5.7	223	29	19 40	8431 0500 98
LTP51 PH004-13 <sup>a</sup>	M14	1/2	155	115	100	75	80	60	190	140	230	2.6	5.7	223	29	19 40	8431 0500 80
LTP51 PH003-19 <sup>a</sup>	M16	3/4	205	150	150	110	95	70	260	190	170	2.6	5.7	223	29	19 40	8431 0513 93
LTP51 PH002-20 <sup>a</sup>	M18	3/4	300	220	220	160	160	115	390	285	110	3.3	7.3	260	31	19 40	8431 0500 64
LTP51 PH001-20 <sup>a</sup>	M20	3/4	415	305	305	220	220	160	520	380	75	3.3	7.3	260	31	19 40	8431 0500 56
LTP51 PH0005-25 <sup>a</sup>	M27	1	805	590	595	435	450	330	950	695	42	3.7	8.2	282	32	19 40	8431 0502 39

Air inlet thread inch: 3/8". Recommended hose size: 10 mm. Sound level: 79 dB(A)

## TECHNICAL DATA – LMP

Model	Suitable for bolt size	Square drive size	Torque range soft joint at 6.3 bar				Free speed r/min	Weight	Length mm	Distance centre to side mm	Air inlet thread in	Air con- sumption at free speed l/s cfm	Recom- mended hose size mm	Sound level dB(A)	Ordering No.		
			Nm	ft lb	Nm	ft lb											
<b>Pistol Grip nutrunners, stall type, reversible</b>																	
LMP24 HR011-10	M6	3/8	10	7	5	4	860	1.0	2.2	210	18	1/4	7	15	10	79	8431 0245 85
LMP24 HR005-10	M8	3/8	22	16	10	7	380	1.0	2.2	210	18	1/4	7	15	10	79	8431 0245 77
LMP24 HR003-13	M8	1/2	30	22	14	10	250	1.2	2.6	210	18	1/4	7	15	10	79	8431 0245 91
LMP24 HR002-13	M10	1/2	40	33	20	15	180	1.3	2.9	230	21	1/4	7	15	10	79	8431 0245 70
LMP51 HR008-13	M14	1/2	190	140	95	70	680	2.6	6.6	238	30	3/8	19	40	10	79	8431 0528 13
LMP51 HR004-20	M18	3/4	380	275	195	140	305	3.9	8.6	275	34	3/8	19	40	10	79	8431 0528 39
LMP51 HR002-20	M20	3/4	550	400	260	190	210	3.9	8.6	275	34	3/8	19	40	10	79	8431 0528 47
LMP51 HR001-25	M24	1	950	695	470	345	125	4.3	9.5	305	34	3/8	19	40	10	79	8431 0528 37
LMP51P HR0005-25	M27	1	950	695	470	345	55	4.3	9.5	305	34	3/8	19	40	10	79	8431 0528 45
LMP51 HR0007-25	M30	1	1500	1105	750	550	75	6.6	14.6	345	42	3/8	19	40	10	79	8431 0528 57
LMP51 HR0005-38	M30	1 1/2	2100	1512	1100	792	52	13,8	30,4	380	68	3/8	19	40	10	79	8431 0528 62
LMP51 HR0004-38	M36	1 1/2	3000	2160	1600	1152	36	13,8	30,4	380	68	3/8	19	40	10	79	8431 0528 65
LMP51 HR0003-38	M42	1 1/2	4100	2952	2100	1512	26	13,8	30,4	380	68	3/8	19	40	10	79	8431 0528 72
<b>Pistol Grip nutrunners – Stall type, non reversible</b>																	
LMP24 H011-10	M6	3/8	13	10	6	4	1000	1.0	2.2	210	18	1/4	11	23	10	78	8431 0245 56
LMP24 H005-10	M8	3/8	30	22	14	10	180	1.0	2.2	210	18	1/4	11	23	10	78	8431 0245 49
LMP24 H003-13	M8	1/2	40	30	14	10	350	1.2	2.6	210	18	1/4	11	23	10	78	8431 0245 64
LMP24 H002-13	M10	1/2	58	43	27	20	230	1.3	2.9	230	21	1/4	11	23	10	78	8431 0245 31
LMP51 H012-13	M12	1/2	110	80	60	45	1100	2.6	5.7	223	29	3/8	19	40	10	79	8431 0510 05
LMP51 H008-13	M14	1/2	190	140	95	70	680	2.6	5.7	223	29	3/8	19	40	10	79	8431 0510 13
LMP51 H006-19	M16	3/4	250	185	132	95	520	2.6	5.7	223	29	3/8	19	40	10	79	8421 0513 69
LMP51 H004-20	M18	3/4	380	275	195	140	305	3.3	7.3	260	31	3/8	19	40	10	79	8431 0510 39
LMP51 H002-20	M20	3/4	550	400	260	190	210	3.3	7.3	260	31	3/8	19	40	10	79	8431 0510 47
LMP51 H001-25	M24	1	950	695	470	345	125	3.7	8.2	282	32	3/8	19	40	10	79	8431 0512 37
LMP51 H0007-25	M30	1	1500	1105	750	550	75	6.5	14.3	323	42	3/8	19	40	10	79	8431 0510 57
LMP51 H0005-38	M30	1 1/2	2100	1512	1100	792	52	13,8	30,4	380	68	3/8	19	40	10	79	8431 0510 59
LMP51 H0004-38	M36	1 1/2	3000	2160	1600	1152	36	13,8	30,4	380	68	3/8	19	40	10	79	8431 0510 64
LMP51 H0003-38	M42	1 1/2	4100	2952	2100	1512	26	13,8	30,4	380	68	3/8	19	40	10	79	8431 0510 68
LMP51 PH005-13 <sup>a</sup>	M12	1/2	125	90													