

LIEBHERR LTR 1220

Telescopic Crawler Crane



Above: In transport configuration, the crane fits nicely on a suitable trailer, shown here on a Doll 5-axle semi low loader.

One of my favourite types of equipment is the telescopic crawler crane so I was delighted to see the announcement from Conrad last year for the release of the Liebherr LTR 1220 model. Originally planned for release mid-2021, the model finally appeared at the end of the year and after waiting patiently, I have to say that Conrad have once again produced a stunning crane model which really does encapsulate the features of the original very well.

Out of the box, the model can be shown in the transport configuration, with the track frames and ballasting separate from the base model. The undercarriage has extending frames to which the track frames need to be connected, and these appear to be very sturdy with very little droop on them when extended.

As the crane is capable of self-assembly, there are two different lengths of jacking rams supplied with the model, again pinning into place on the four support arms which pivot through 90 degrees. The jacks lower by rotating them, with smooth surfaces to the jacks as they extend. Plastic support feet clip into position on the ends of the jacks, allowing the crane to be posed in the assembly stages.

Each track frame has tensioned idler wheels to keep the individually linked track pads taut and this works well,

with a frame fitted above the tracks into which photo-etched platforms are fitted, with them sliding into place. Once the frames are attached to the undercarriage, these photo-etch platforms clip into the main walkway on the undercarriage and the engineering solution to mimic the operation of the real crane is very impressive. Conrad have included a

lifting bracket that mates with the track frame to show the track frames being lifted into position which is another nice addition.

Looking at the instructions, assembling the track frames looked to be quite tricky, but hats off to Conrad, I found the experience easier than expected, particularly with the metal pins that need fitting to the upper part



Above: The semi-trailer can also carry the ballast equipment, shown here loaded with undercarriage ballast and main ballast plate.



Right: The model can be shown in self-assembly mode, lifting the track frames from the trailer to connect up with the undercarriage frame.

Above: The track frames have integrated photo-etch walkways which slide as the track frames are extended.



Above: The main crane ballast consists of a base plate and six ballast blocks, three per side.



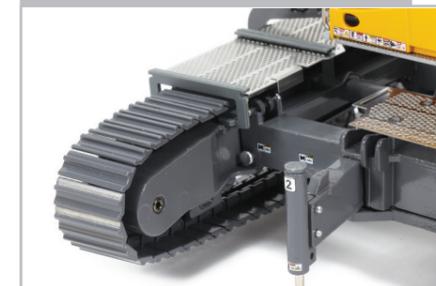
Above: There are two undercarriage ballast blocks which just clip into place.



Left: There are two options of jacking supports, long ones or short ones, either of which pin into place on the pivoting support arms.



Above: There is an all-round photo-etch platform which really looks the part.



Above: The track frames hang on the top bracket with a pin inserted through the bottom hole to lock them in place.



Above: The counterweight can be assembled on the undercarriage ballast, a neat solution which is perfectly replicated.



Above: There are four access ladders that can either be fitted to the ballast blocks, or to the outside of the track frames.

of the track frame. The instructions say the pins need to extend on either side by 2mm and I was expecting them to move around, thinking I might need a touch of glue to hold them in place, but once again, the precision engineering from Conrad is perfect, and if you insert the pins in the direction shown in the instruction sheet, the first hole allows the pin to fit easily, while when pushing the pin into the second hole, the tolerance is tighter, so the pin actually holds position once inserted, so no glue needed. This pin rests onto the upper section of the extending frame of the undercarriage with the lower pins sliding through the holes easily to lock the track frames into position. A new development here is that all the various pins are actually metal, while in the past, Conrad would usually use plastic pins and I have to say I am a big fan of the metal pins.



Below:
Attaching the second track frame to the undercarriage, using the included lifting bracket.



Once the track frames have been attached, the undercarriage ballast can be installed, clipping into place. The four access ladders can either be attached to the sides of the undercarriage ballast, or to the outer sides of the track frames depending on collector preference. With the track frames and undercarriage in place, it is time to set up the main counterweight for the crane, with the baseplate slotting into position on the undercarriage ballast, where the individual ballast plates can be installed, up to three on each side. Once ready, the counterweight plate clips into place beneath the upper carriage frame.

There is a secondary winch that pins into place behind the main winch for two hook operation and there are two hooks in the box, a three-pulley hook and a headache ball hook. The winches are operated by hand, with a ridged edge that can be turned by thumb. The disadvantage to non-

braked winches is that there is no resistance, so it is not possible to show the crane lifting a heavy load, like the track frames, which is a shame.

There is a two-section fold out lattice jib supplied in the box which fits onto the brackets on the side of the boom when not in use, pinning into place on the tip of the boom to extend the height of the crane. The jib can be set at three different angles.

The main 6-section telescopic boom can be extended and each section locks in one of three positions, 50%, 90% and 100% with printing used on each boom section which is nice to see. The main lift hydraulic has a top section that can be rotated to lock the inner piston to prevent the boom from collapsing and this works well, with a special key included to tighten the cylinder. This appears to be stable enough to hold the boom at any angle, even with the boom fully extended.



Above:
The six-section telescopic boom can be extended and locks in three different positions.



Left:
The jib can be set in one of three different angles, pinning onto the tip of the boom with the included metal pins.

The operator cabin has a modelled interior which captures the main components, with the cabin tilting a little, although on the review sample, it does not hold the position very well when tilted.

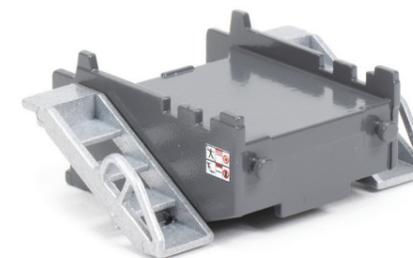
For me, Conrad have done a splendid job with the engineering of the Liebherr LTR1220 and it has already become my favourite telescopic crawler crane model, easily surpassing the previously released LTR1100 which itself was a very impressive release. I can see a number of company decorated versions of the model appearing in the future, and would not be surprised if some are already in development.



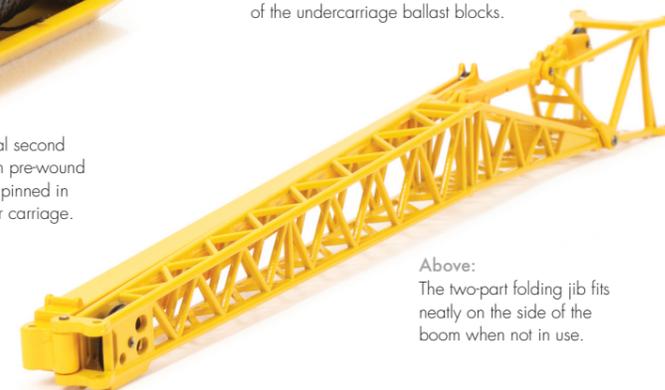
Above:
The Liebherr LTR1220 crane is an example of the very high levels of engineering that goes into a Conrad model to mimic as much of the functionality of the real machine as possible.



Above:
There is an optional second winch housing with pre-wound winch that can be pinned in place on the upper carriage.



Above:
The access steps can be fitted to the sides of the undercarriage ballast blocks.



Above:
The two-part folding jib fits neatly on the side of the boom when not in use.



Above:
The model has a narrow footprint with the track frames retracted.



Above:
The cabin has a replicated interior and can be tilted for a better view when working at height.



Above:
The all-round perforated platform and access steps fitted to the undercarriage are convincingly modelled.



Above:
The number of counterweights loaded to the base plate can be reduced, and it will still connect up with the jacking supports.