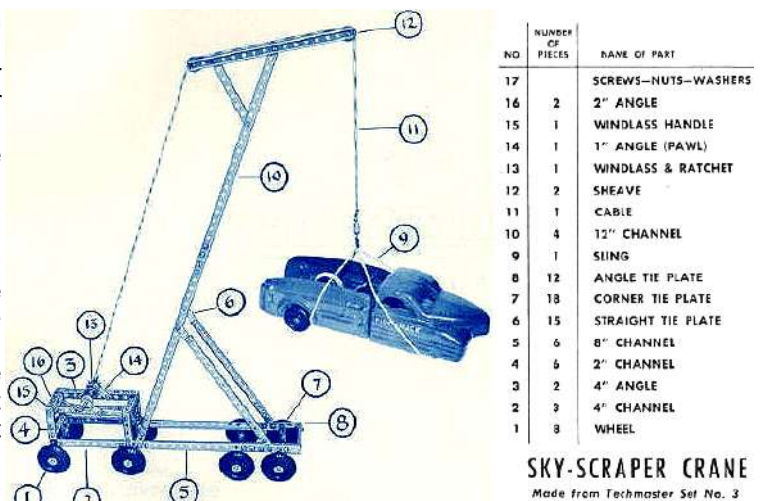


parts easily recognisable are the Wheels, the green Spool with the Crank Handle through it, and the 4h Strip. Also the Pulley in the foreground although it looks larger than the one in the No.50 – perhaps it is the Medium or Large Sheave, both called up for the Tier Lift in MCS – the brass looking Pulleys above the Spool look more the No.50 size. The reddish part on the centre of the third Wheel may be the Ratchet. A darker yellow rectangle can be seen between the Wheels with a pattern of 4\*8 lighter 'holes' in it – more parts perhaps, or possibly an unfaded area of the backing card where parts had once been. Its unclear what the greyish parts to the left of the manual are, or even if they are of the Set.

The notes with the Ebay offer gave the Set No., the name & address of the maker (as before), and said that the bag contained a Screwdriver and the N&B. Also that the parts were wired to the card.

The manual cover is the same as the one in MCS and two other examples of manuals with the same cover have been seen on Ebay. It is said to be 9\*6" and to have 16 pages including covers. One site listed the models in it, 12 in all, from TIER LIFT (the one in MCS) which could be made from 'Sets 1, 2 & 3, to SKY-SCRAPER CRANE, which needed Set 3. So it is likely that the sets were progressive. The last



model is shown above (with the original white on blue PL changed to B&W), notice the 12" Channel in it. Most of the other models are on the front of the manual – full instructions have been seen for the 5<sup>th</sup> & 6<sup>th</sup> models, PORTABLE CRANE & WINDLASS, on p8 & p9 – both are for Sets 1, 2 & 3

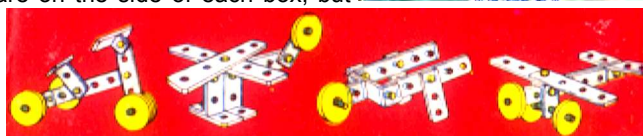
## TECHMASTER: S1

OSN 33/998

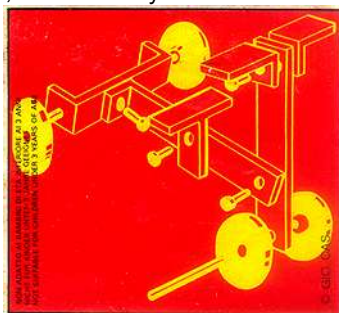
**GIO** This little Italian system, said to be from the 1960s, is in MCS but without much detail. Now 3 different unopened sets are to hand, each to make a single model, a Helicopter, a Trike, & a Handcart. There are only 6 different parts, all small, plus plastic Plugs in 2 lengths to join them. The **GIO** name isn't obvious on the box but comes from the name of the Bolognese maker, Gio Cas, on the side of the box right.



Each set is packed in a little end-opening **box** 6\*5½\*1½cm, & right is the top of the one for the Handcart (x¾). 4 other models are shown on one of the box's sides, as below (x1½), including the Trike (Triciclo) & the Helicopter (Elicottero). It isn't certain how many sets were available - the same 4 models are on the side of each box, but



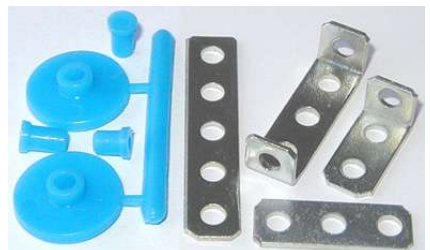
the Handcart isn't among them, so there may have been other 'extra' sets. The bottom of each box has an exploded view of the model, as right for the Trike (x¾) The small print down the left side is 'Not suitable for children under 3 years of age' in Italian, German, & English. The parts are in a sealed transparent packet.



The **parts** are shown at the head of the next column. The blue ones are plastic with the Plugs originally attached to sprue (but much thinner than for the Wheels). The metal pieces are bright plated, probably nicked, a few rather patchily. They are about 1mm thick, 7.5-7.7mm wide, & their corners have a small chamfer. Quality is adequate except that the bends are 5-10° short of 90°. The **holes** are at 7.5mm pitch and are mostly 3.4mm Ø, with a few

as small as 3.3mm.

The **Plugs** have a 1.5mm bore, but are closed off at the end of the shank. The head is 4.2mm Ø and 1½mm deep; the shank 3.4mm Ø and either 4 or 5mm u/h, enough to easily take



2 or 3 parts respectively. It is hard to push a Plug into the 3.3mm holes and removal is even harder; the grip in the other holes is adequate if parts held by a single Plug are handled with a little care. The **Wheel** is 14½mm Ø with a 2.9mm bore, and is thus very, very hard to push onto a Plug, and of course if it is attached in this way it isn't free to turn. An alternative is to use the sprue the Wheels are attached to as an **Axle**. It is 36mm long, just long enough if it runs in the DAS, & though slightly oval in section (2.8-3.0mm), that isn't really a problem. An Axle isn't shown for the Handcart but as can be seen two are indicated for the Trike, but with no indication that the sprue should be used (doubtless it would be obvious to your average bambino but it took me a while to figure it out – initially I assumed that, like the necessary 5<sup>th</sup> A/B, the Axles were missing). It wouldn't be possible to use Axles in the Helio, so both its rotors would be fixed.

**Quantities** The parts found in the Handcart, Helicopter & Trike sets are given in curly brackets for each part. 5h Strip {4,3,2}; 3h Strip {-,3,-}; DAS {3,-,1}; 2\*1h A/B {-,3,4}; Wheel {2,2,4}; sprue Axles {1,1,2}; Plugs {6,6,6 of each type}.

The **models** on the box tops don't correspond exactly to their exploded views underneath. Thus the Handcart left was



built with one less DAS cross member (as per the exploded view and the parts in the Set) – it is considerably less rigid as a result. The parts for the Trike don't include the 'T' & 'L' parts shown on the box and A/Bs are used instead, with one too few supplied, as already noted.



seen which have one, it has a wooden handle, apart from the wire one in Fig.3. Perhaps the latter 'belonged' to one of the doubtful Spanners. **Gear Rings.** 32/14 teeth. {steel, 34/14} **Spring Cord.** Not seen. {steel, 1.9mm Ø with looped ends}

**Other Parts. Set Screw.** Steel, 5mm Ø cheesehead, 4¾mm u/h. **Grub Screw.** Steel, 5¾mm long, flat end. {none, only Set Screws}

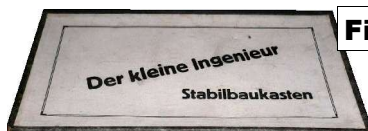
**The SETS** The boxes measures 37¼\*19\*5cm and the labels are identical to the manual cover (Fig.1) in size & design, except that each has its own PR in the small panel bottom right. The only exception is the lid mentioned earlier with the Geräte company name & logo on the added label. Lids are made of different cardboard to the bases and are lighter in shade.

The set contents are given in Fig.2 and are very similar to the prewar MÄRKLIN No.2. Apart from some minor differences, the Leichtmetall set has no Curved Strips and only 68 against 80 N&B. A plus though is that LEICHTMETALL has 2 lengths of Bolt.

The boxes have 2 layers of parts with different partitioning. They are shown in Fig.3 with the parts placed in what seem to be likely places; the righthand 'A' set is the earliest. There would have been plain cardboard lids over the 3 centre bays.

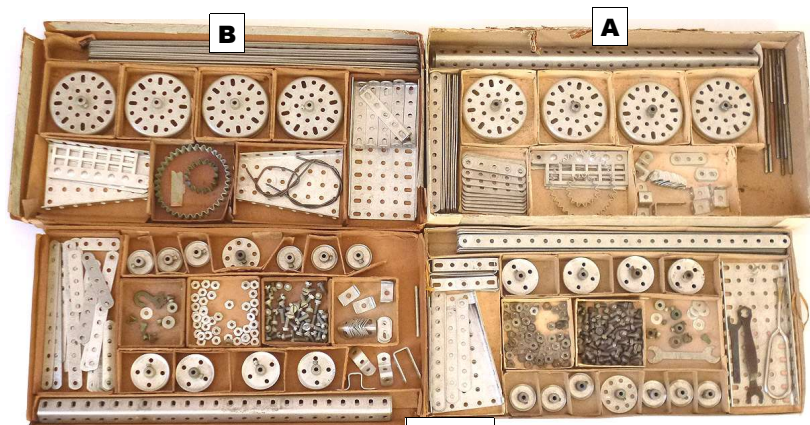
Two sets with the lid below were offered in one lot on Ebay recently, and a Set with the same lid was offered in 2003, and another, in 2006. All looked largely complete with LEICHTMETALL parts, all had the same Fig.3A partitioning, & the Fig.1 manual. Perhaps the label was 'home-made' and perhaps the same sets were being reoffered, but there were minor differences in their contents which made me wonder.

**The MANUALS** have 8 unnumbered pages about 295\*180mm plus covers. The earliest Totschmasch manual has the plain cover in Fig.6 (or it might be an added title page). All the others have pink, or in one case grey covers, with the same label (Fig.1). It has the artist's monogram in the bottom left corner. C2 has the Illustrated Parts (Fig.2) with quantities. The inside pages and C3 show 16 models from Langholzwagen [Railway Timber Wagon] to Lokomotive. The model pages look unchanged in all the manuals seen. All the models are no doubt copied from MÄRKLIN, I found most of them among the No.1 & 2 set models in a late 1930s manual, though there they were shaded drawings and not of the LEICHTMETALL/earlier MÄRKLIN type.



**Fig.4**

Two sets with the lid below were offered in one lot on Ebay recently, and a Set with the same lid was offered in 2003, and another, in 2006. All looked largely complete with



**Fig.3**

# Erforderliche Teile

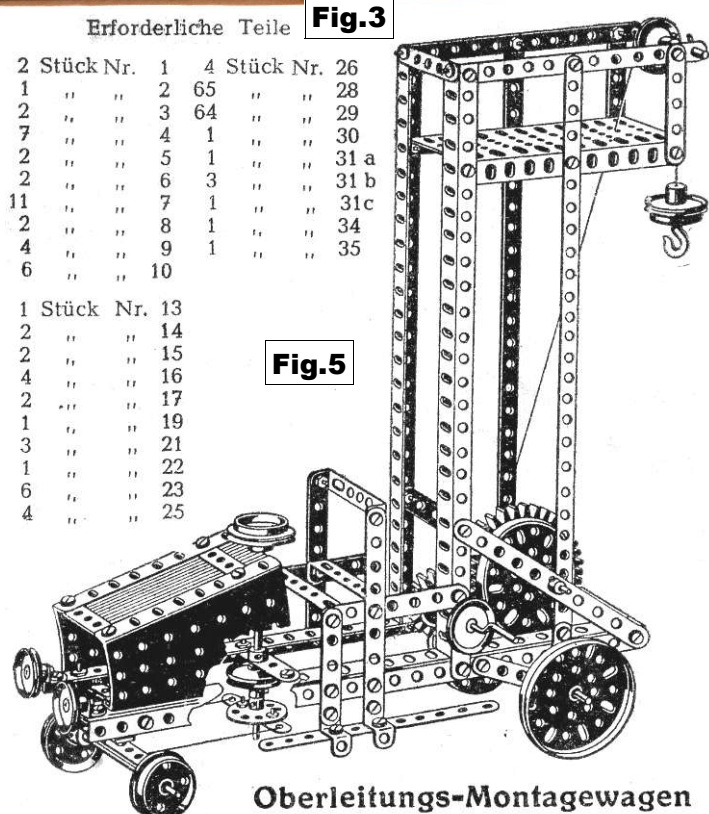
**Fig. 5**

2	Stück	Nr.	1	4	Stück	Nr.	26
1	"	"	2	65	"	"	28
2	"	"	3	64	"	"	29
7	"	"	4	1	"	"	30
2	"	"	5	1	"	"	31
2	"	"	6	3	"	"	31
11	"	"	7	1	"	"	31
2	"	"	8	1	"	"	34
4	"	"	9	1	"	"	35
6	"	"	10				

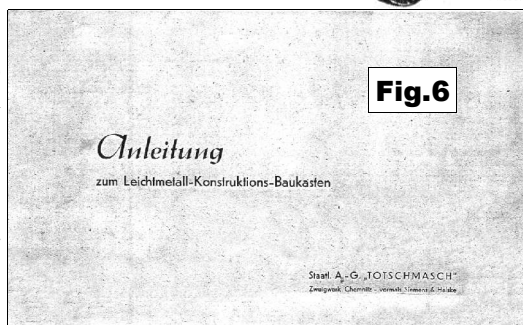
1	Stück	Nr.	13
2	"	"	14
2	"	"	15
4	"	"	16
2	"	"	17
1	"	"	19
3	"	"	21
1	"	"	22
6	"	"	23
4	"	"	25

**Fig. 5**

**Fig.5**



**Oberleitungs-Montagewagen**



**Fig.6**

One of the models is shown above at its original size, it is the only one in which the Gear Rings are used.

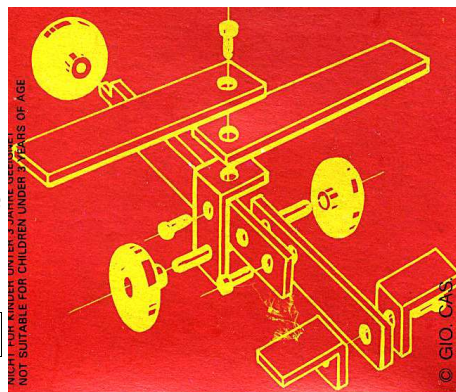
C4 is plain with just a PR which differs from the one on the lid label. A typical PR is (C231) Sachsenverlag Chemnitz 1951 1047 2000 C 100224, but the numbers are usually different and sometimes the printer's name is omitted.

**LEICHTMETALL: S2**

**OSN 51/1572**

**Another GIO Part.** 3 sets from this 'mini' Italian system were described in 33/998, and Jean-Pierre Guibert has found a 4<sup>th</sup> with parts to make an Aeroplane, a model which is among those shown on the sides of all the set boxes.

It can be seen from the constructional drawing of it, right, that the part



**Fig.1**



**Fig.2**

propeller pushes onto a spigot which has been added to the end of the normal 5h Strip, as above in Fig.2. This modified Strip was not included in any of the three OSN 33 sets.

**GIO: S2**

**OSN 51/1572**