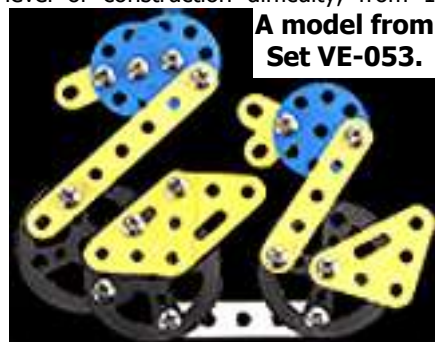


DELTA-X Mark 2 It may be recalled that years ago the Japanese DELTA-X had parts a little larger than MECCANO with holes at 14.0mm pitch (see 11/288, 29/845, 31/924). Now Paul Goodman has kindly sent details of a set that was bought in Japan last year, and although some of the parts look unchanged they are in fact much reduced in size, with holes of about 3mm at only 7mm pitch. The old parts were steel with some plastic, including thick Flexible Plates; in the new system nearly all the parts are available in both steel & plastic. One innovation is that plastic 'hinges' are built into some of the Strips, and a few other parts, so that for example, the ends of such a Strip can bent up to form a DAS, with the lugs at an angle if necessary.

Märklin of course started a fashion for miniature parts with its MINEX in 1939 and although it was not reintroduced after WW2, several other 'mini' systems appeared at that time, some of them with a good range of parts including Gears. MIGNON for example was one (see 10/262), and the Austrian METEOR another (see 12/302, 17/474, 19/534). Model building with such small pieces, and in particular with tiny N&B, was more difficult than with larger parts, and most of the mini systems had disappeared by the mid-1950s, though METEOR may have continued into the 1970s. So it will be interesting to see how successful the new DELTAX will be. The box of Paul's set, and the Instructions in it, are both copyright 2005, so the small parts may be a relatively new innovation. DELTA-X was, and is, sold by the Epoch Co. Ltd. of Japan but the new parts are made in China.

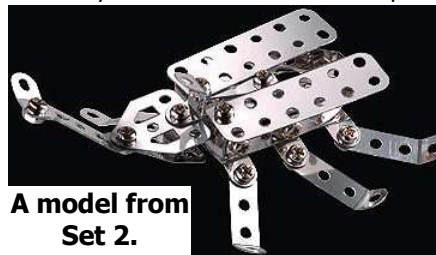
Before describing Paul's outfit, an account of the range of **new DELTA-X sets** that are available, as shown on the Epoch web site, www.epoch.co.jp. (The site is mostly in Japanese and therefore I don't absolutely guarantee what follows.) There are a total of 40 sets in 4 series, and they range in price from (before tax) ¥190 to ¥3980 (£1-£20). All the sets are basically to make one model but one or two smaller models are also shown for each, quite often just a 2-dimensional shape, like the Duck & Duckling below. A level of construction difficulty, from 1,



A model from Set VE-053.

the easiest, to 7, is given for each outfit.

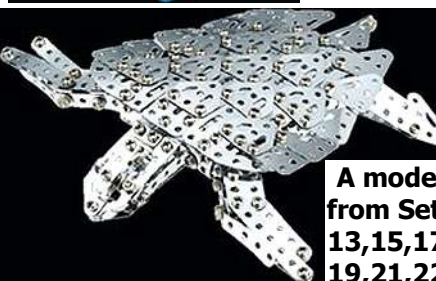
One series of 22 small sets, numbered 1-22, includes a Jet Fighter, 2 Helicopters, & a Motorcycle, but is mostly about various Insects & Dinosaurs. 20 of the 22 sets are pairs with one set for a model made of coloured parts and the second with all silver parts for the same model. All the sets cost ¥190 and are Level 1 or 2. Also mentioned are a Swallowtail Butterfly & a Tortoise, both Level 4, which can be made by combining the parts from 5 or 6 of the Sets. Only one model is powered, the Motorcycle, by a Spring Motor. Below one of the Insects, a Dinosaur, and the Tortoise. One point of interest, these sets may be available from a 'capsule



A model from Set 2.



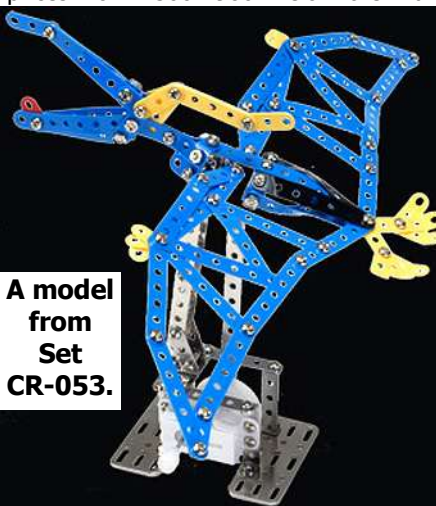
A model from Set 18.



A model from Sets 13,15,17, 19,21,22.

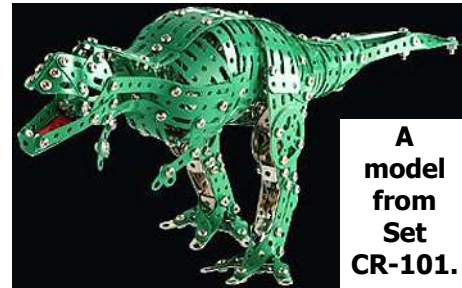
vending machine'.

The next series of 8 sets (CR-001,002, 051-4,101,102) comprises 3 for Insects & 5 for Dinosaurs, at Levels 1-5, with prices from ¥500-1980. Below the main



A model from Set CR-053.

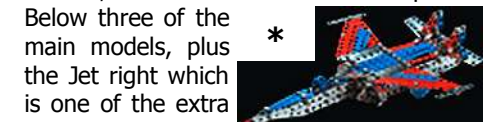
A model from Set CR-002.



A model from Set CR-101.

model from one of the sets, with two more above. The Pterodactyl, and an Insect not shown here, have Spring Motors.

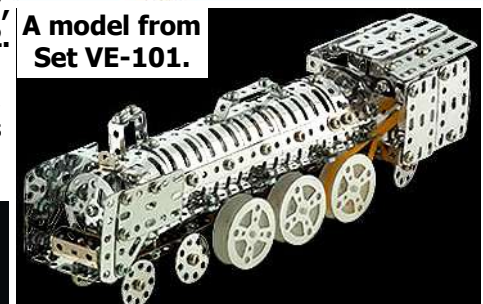
The next series of 7 sets (VE-001,002,051-3,101,151) moves into the mechanical world with a small Helicopter, a Buggy, a Delivery Van (called a Classic Car), a Motorcycle, a Biplane (Paul's set), a Loco, & a Tandem Rotor Helicopter. Below three of the main models, plus the Jet right which is one of the extra



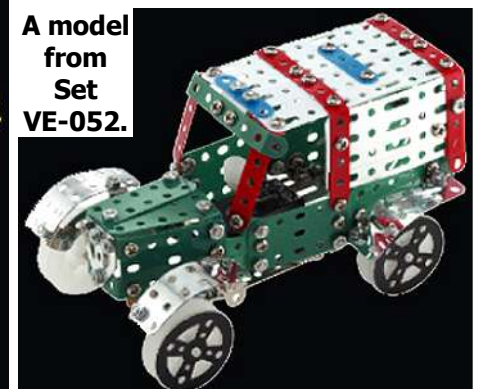
*** Models from Set VE-151.**



A model from Set VE-101.

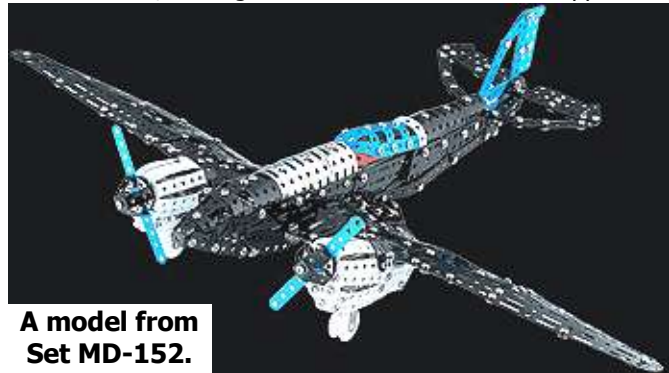


A model from Set VE-052.

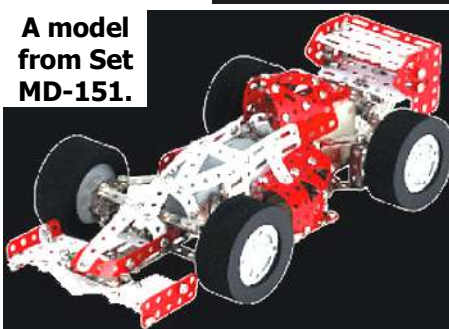


models for the VE-151 outfit. The Sets cost ¥500-3980 and are Level 1-6 of difficulty. All are powered, except possibly the Loco, although there seems to be a band around its rear large Wheel. Again a Spring Motor is specified in most cases though electricity is also mentioned for the large Helicopter.

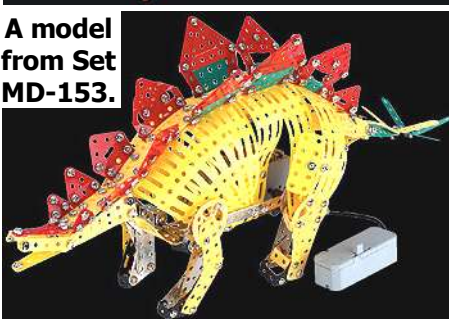
Finally 3 sets (MD-151-3), Level 6 or 7, cost: ¥3200-3980, for the Racing Car, DH 88 Comet, & Stegosaurus below. All



A model from Set MD-152.



A model from Set MD-151.



A model from Set MD-153.

have a Motor, type unspecified but there is a Battery Box by the Stegosaurus. I don't know of any particular Japanese connection with DH 88 and I wonder why Epoch decided to model it - perhaps just because it was thought to be one of the most elegant aircraft ever made.

There is one more DELTA-X item, a Set TL-001 with an Electric Screwdriver and enough parts to make a little Elephant.

The last item I found on the web site was an announcement of a rolling model building competition with monthly prizes. Entrants send in a 9*12cm colour photo, and age 15 is mentioned but perhaps only in connection with an adult authenticating entries for those under that age.

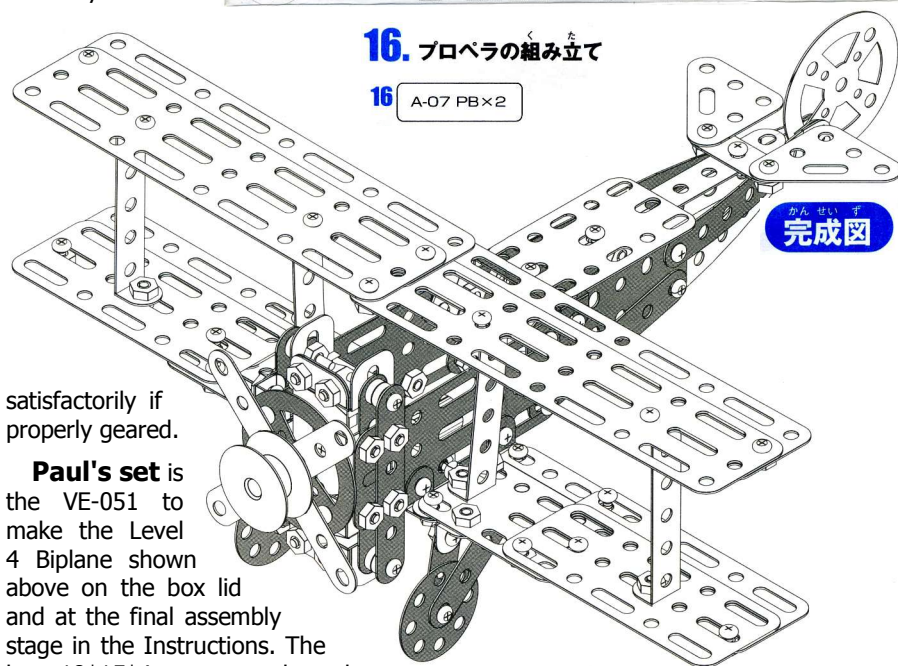
All in all the DELTA-X range seems refreshingly different to the small models from Polylong, with not a Crane, Bulldozer, Digger, or Tank in sight. I wonder

though about the play value of those Insects & Dinosaurs, attractive looking though many of them are. Additional notable absences in the range of larger DELTA-X models are Bridges, Fairground Rides, & Lorries. I wonder what the competition is in Japan. Do Polylong sell their sets at the bottom end of the market there? Nikko certainly sell MECCANO in Japan but nearly all their sets are appreciably more expensive than

in red, yellow, green, & blue; and the SS for, probably, steel, silver. The SS parts have a bright finish, nickel plate possibly. MS is used for shiny silver plastic parts which match the metal finish, but what the M indicates isn't obvious - Paul suggested Metallic Silver as at least a good descriptive meaning for the initials. The parts in the last 2 columns which don't have PNs are: a Road Wheel (but see later); a Pulley (used as the spinner



DELTA-X, at up to ¥16000. The use of spring motors in many of the larger Epoch models is also unusual today but they can work



satisfactorily if properly geared.

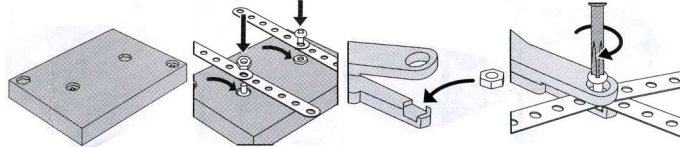
Paul's set is the VE-051 to make the Level 4 Biplane shown above on the box lid and at the final assembly stage in the Instructions. The box, 18*15*4cm, opens along the side, and its underside has the company name, web address, phone number (029-862-5789), and '© 2005, Epoch Co., Ltd. Made in China.'

The parts in the Set can be seen in the table on the facing page, taken from the Model Leaflet - the original also contained the names of the parts in Japanese. After the line drawing of the part is its letter code followed by the number of holes in it, and followed in turn by a material/colour code and the number of the parts in the Set. The letter codes, PR, PY, PG, & PB stand for plastic

on the Biplane - it is a push fit on the substandard diameter Motor shaft); the Spring Motor; 4 crosshead Bolts (about 2½mm Ø, 4,8,12,16mm u/h); the Nut (the N&B have the SS finish); a Screwdriver and 2 Spanners; a tubular Box Spanner (we are now at the top of the last column); 2 Tools (described later); 2 more Tools, unknown; a plastic Axle Stop; what might be a Driving Band; and an Axle (probably). Many of the parts in the Table are not in the Set and from the photos of the other models nearly all their parts are included in it. But not all,

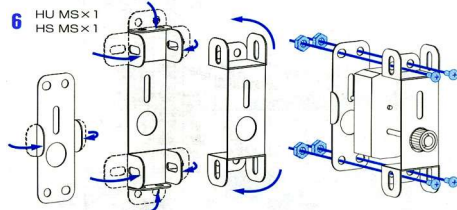
the Wheels of the Racing Car for instance, and the Battery Box by the Dinosaur (plus Electric Motor presumably). Also I'm not sure about the Road Wheel used in a number of the models. In the Van it looks like a round thick slab of plastic faced with a CR13 Disc but in other models it appears to be the Road Wheel in the Table, a Pulley faced with a CR09, and in yet others the same Pulley but faced with a CR13. But it would seem odd for a pulley shape to be used as a Road Wheel without any form of tyre.

All the Tools are plastic and Paul said that they were designed for small fingers. Also that although they were adequate to make the model the Screwdriver was losing its grip by the end. The two special Tools mentioned earlier are



shown above. One is a Block with 2 indentations, one Nut-shaped & one shaped to stop the head of a Bolt from turning. The other is a pair of Pliers with jaws which allow a Bolt to pass through the parts to be joined and screw into a Nut held in the lower jaw. I asked Paul if he had found these aids helpful and his one word answer was 'No!'.

Hinges in the MS Strips are shown by lines across their width, and their SS equivalents have no hinges of course. The SS version of BL is an A/B so it's likely that the SS versions of the BU parts are DAS. None of the 'hinged' parts in the Set are in coloured plastic and it isn't clear if any of the coloured parts have hinges. As can be seen below the

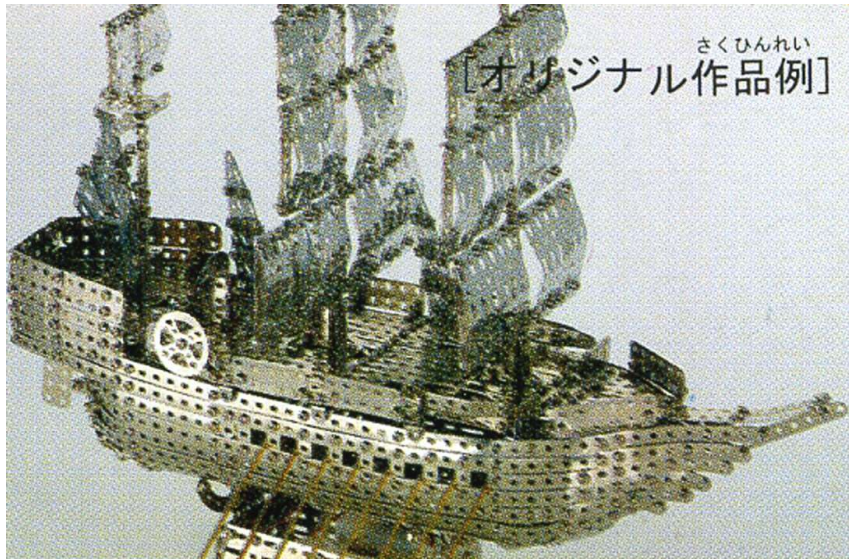


Motor Mounting Brackets HS & HU have hinged lugs - the Motor is clamped between them and then the assembly is bolted between the side Plates at the front of the fuselage.

The Instructions, virtually all in Japanese, are on an A3 sheet folded to A4, and printed in B&W with touches of blue. The front has the set

contents and shows how to use the Tools. The other sides have fairly clear line drawings for a small 2-D Car in 1 Step, and then the Biplane in 16 Steps, with a list of the new parts needed at each stage. The Motor mount drawing in the last column is from Step 6. At the bottom of the back side are the company details as on the box. The fuselage is mostly metal, the wings & tail plastic. The wingspan is 20cm. The Pulley used as the spinner is no doubt used in other models that require a belt drive from the Motor, but it does look out of place in the Biplane. Paul said that building the model was in the main reasonably straightforward but a little tricky at the junction of the fuselage and lower wings. The Motor creates quite a lot of noise but only turns the propeller at a slow tickover. It is hard to wind the Motor because the winding knob is inside the 2½cm wide fuselage, and it might be too hard for a youngster to manage as it becomes harder towards fully wound.

Finally the photo below of a rather nice Galleon taken from the back of the box, one of the competition models perhaps. To my mind it's splendid to be able to make such a model with all silver parts, and to have other models with touches of colour, or in full colour. But I could see no mention of parts sold separately on the Epoch web site and a lot of sets would be needed to give enough parts for just the sails on the Galleon. The majority of what I take to be competition models on the web site are rather a hotchpotch of silver & coloured parts.



	A	02	SS MS PR PY PG PB			A	05	SS MS PR PY PG PB			S2	10	SS MS PR PY PG PB			PG	07	SS MS PR PY PG PB					1
			SS MS PR PY PG PB	6 6				SS MS PR PY PG PB	2				SS MS PR PY PG PB	2				SS MS PR PY PG PB			1		1
	BL	02	SS MS PR PY PG PB			BU	05	SS MS PR PY PG PB			S2	12	SS MS PR PY PG PB			TR	06	SS MS PR PY PG PB	2 2		1		1
			SS MS PR PY PG PB	2 1				SS MS PR PY PG PB	6				SS MS PR PY PG PB					SS MS PR PY PG PB	2 2		61		
	A	03	SS MS PR PY PG PB			A	06	SS MS PR PY PG PB			PC	07	SS MS PR PY PG PB			CR	09	SS MS PR PY PG PB			11		
			SS MS PR PY PG PB					SS MS PR PY PG PB					SS MS PR PY PG PB					SS MS PR PY PG PB			4		8
	BU	03	SS MS PR PY PG PB			BU	06	SS MS PR PY PG PB			S3	13	SS MS PR PY PG PB	1 4		CR	13	SS MS PR PY PG PB	1 1				
			SS MS PR PY PG PB	4				SS MS PR PY PG PB	2 4				SS MS PR PY PG PB	2 4				SS MS PR PY PG PB	1 1		76		
	A	04	SS MS PR PY PG PB			A	07	SS MS PR PY PG PB			S3	15	SS MS PR PY PG PB			HS		SS MS PR PY PG PB			1		
			SS MS PR PY PG PB					SS MS PR PY PG PB					SS MS PR PY PG PB					SS MS PR PY PG PB					
	BU	04	SS MS PR PY PG PB			BU	07	SS MS PR PY PG PB			S3	27	SS MS PR PY PG PB	4		HU		SS MS PR PY PG PB	1		1		
			SS MS PR PY PG PB					SS MS PR PY PG PB					SS MS PR PY PG PB					SS MS PR PY PG PB					

one additional set, the Classic CO2. It is said to have the same number of parts, 929, as the original CO1 Classic set described in OSN 33, and the lid shows the same Bus, but it is in B&W and is plainer in style. The box, 380*290*65mm, is a little larger than the CO1, and weighs more, 3.2 against 2.7kg.

The sets available from the U.S. Girders & Gears web site (www.girdersandgears.com) include the AH-64A Apache set which hasn't been mentioned in OSN before, and seems to be for the American market only. Its box is 10¾*14*1¾" and the



lid, above, claims 470 parts & over 40 models. The name M-KUR on the box is used because Ford (I believe) use the name 'Merkur' and had registered it before the Czech firm entered the U.S. market. The larger parts are dark green while the small ones, 4 Worms (used as 'decor') & Brackets have a bright finish, probably BZP. As is usual in MERKUR the model isn't powered. 9 of the other models are shown on the G&G web site with 2 reasonable small Helicopters and the rest, well look for yourself.

MERKUR [1]: S5

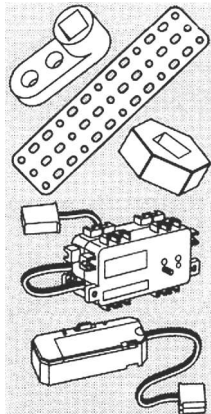
[37/1103]

13. COSTRUZIONI MECCANICHE These are the only words on a No.1 manual cover shown in an entry under this name in Jeux de Construction Métallique (JCM). Also shown, a page with 2 models whose illustrations are identical with those in a 1920s MÄRKLIN manual, and a page with a list of the Set Contents of the No.1. In JCM it is implied that the manual would be from an AMI-LAC outfit, and indeed COSTRUZIONI MECCANICHE is the main name on all AMI-LAC manuals I've seen, though with an AMI-LAC logo as well, or just the AMI logo on earlier ones. I couldn't find either of the models in the AMI(-LAC) manuals to hand and this, together with the absence of a logo, made me wonder if this was actually a manual from a different, and hitherto unknown system. To support this the names of the parts in the Set Contents and their PNs don't correspond to those in the AMI(-LAC) manuals seen. One further thought, it is said that prior to their post-WW2 production, the AMI firm made sets for a short period in the early 1920s, so could this manual have come from that time?

COSTRUZIONI MECCANICHE S1

[37/1103]

14. DELTA-X Since the notes in 36/1096 an MD-153 Stegosaurus set has come to hand and it contains the parts right which were not known before. The 3*13h Perforated Plate is nicked and its slotted holes are 4.3mm long. The other parts are grey plastic: a Geared Motor with a square section output shaft on each side, the 1x AA Battery box shown in the OSN 36 model, a Crank which snaps onto the Motor shafts, and an hexagonal Spacer with a square bore. All the metal parts in the set are nickel plated. A few errors



OSN 37/1103

crept into the OSN 36 notes, the hole pitch is actually 8.0mm and the thread is M3.

The finished model is about 15" long and it waddles along quite well on a smooth surface. Its speed scaled up to match a 30ft long animal would be about 8mph.

The Stego set came from www.hlj.com/top/Sci, an English language Japanese mail-order toy shop called Hobby Link. When I looked in July six DELTA-X outfits were listed (to see all of them I had to type 'delta-x' into the Item Name box on the home page). 5 of the sets were mentioned in 36/1096, the other was the Robot Soldier set below. It was said to be a



31cm high model of a figure in the Japanese cartoon film 'Castle in the Sky: Laputa', made in 1986, with eyes that light up. It was marked as discontinued though and I couldn't find it on the Epoch web site, so perhaps small-scale DELTA-X dates from earlier than was suggested in OSN 36.

P.S. Since the above was written I've been told that the small scale DELTA-X was definitely on sale before 2000.

DELTA-X [b]: S4

[37/1103]

15. ENTECH in 2007 From www.toy-kraft.com, the range of these Indian sets, made by Aries, is unchanged from 2005, see 33/995.

ENTECH: S3

[37/1103]

SMALL ADS

[37/1103]

Wanted Information on the history & products of the **Kelmet Corp.** (who made STEEL ENGINEERING) and the **Nobel Mfg. Co.** (who made Trumodel Construction Equipment in Miniature). Please contact John H. Emmons at jemmons@neo.rr.com or phone (330) 492-3601 (in U.S.A.). I already have the material in Greenberg Vol.1, and the ACGHS & S.Cal. Newsletters.

Tri-ang ARKITEX 75% upwards of the different parts (all plastic) from a Bridge Set (no box), and a manual/catalogue which also covers Sets 1-3 for Buildings. All in good condition but the models are not very exciting. Some of the parts look as if they could be used in Buildings. Free from the Editor but new owner to collect or pay postage - packed weight 2¾lb. (If more than one person wants it I'll draw a name from a hat on 1st November.)

For sale: MCS Don Blakeborough 1983, as 14 clip-bound books with card covers. Weight about 5.4kg. £20 plus postage. Will post to UK only. David Hobson, Woodington, Edford Green, Holcombe, Radstock, BA3 5DB; tel: 0171 232741.