## MCS DATABASE 2010: Intro; notes; abbreviations

#### **GENERAL**

The Database parameters are those thought to be most useful, and they have been taken from MCS, OSN, and other sources. Where possible dimensions have been checked by actual measurements, but even then it should be remembered that they have often come from a single sample. Variations italics. End dates in particular are often uncertain because may occur from wear, manufacturing tolerances, or changes products were in the shops well after production ceased. deliberately made by the manufacturer at different times.

each entry that contain additional information, and notes that may help to bring the system to mind.

In order to get all the information across one page opening, many abbreviations (codes) have been used. These, which sometimes vary from column to column, are shown in lettered groups on the rear cover. Where abbreviations are BS (Boss) - THREAD Codes for the types of boss are used in a column, the appropriate group letter is shown at the given at 'H' The threads used in tapped holes in bosses are head of the column. The only exceptions to this are the again at 'G'. narrow columns that separate the main columns. They are normally empty but sometimes house the abbreviations given in Codes A - these have the same meaning in all the 'narrow' columns, and they always relate to the entry on their was the original parameter. immediate left.

Except in the DATES column one or more hyphens (-- for example) indicate that the feature doesn't exist in that system. Blank spaces show where data are lacking.

Part 2 contains sorts by Country and TYPE (see below) but with a reduced number of parameters and without the COMMENTS. It also lists all the Reference Codes (see REF below) arranged in alphabetical order, and the brand names dST, dBS, DAXL dST is the i/d of holes in Strips or the used for sets which are covered under POLYLONG in Part 1.

#### **NOTES ON THE COLUMNS**

REF (Reference Codes) These are used mainly to help in with normally 1 decimal place. Integer numbers denote poorer moving from one page to the opposite one, but also information, sources often give nominal sizes. 'm' after any of sometimes to save space in the COMMENTS.

**NAME** The names of the systems generally follow MCS practice except that Cyrillics have been transliterated, MCS is not entirely consistent in that sometimes the maker's name is given followed by the name of the system, and sometimes one or other is used on its own. Partly because of this some crossreferencing has been included, particularly where there are differences between the names in the /NZ & /FB versions of MCS. MCS names that are not used are still included but with no details, and the new Name is shown in the Comments column. Where different names have been used for one system, in different markets for example, or in the same NB N is the shape of the Nut, B that of the Bolt head - see 'J' market for bilingual sets, all the names that are known are listed, but the full details may only be included once, with cross-references to & from the alternative names.

Mfr (Manufacturer) This column needs completing but the intention is to give the manufacturer if more than one A/F The size of the nut across flats in mm, see Codes 'K'. system has come from the same maker, or, in some cases, where a system has been made by more than one company. Codes used so far are at 'B'.

**TYPE (of System)** Each type of system is allocated a twoletter codes from List 'C', using the priorities given in OSN 4/72. A second code can be used to allow cross-referencing, should be obvious from the context. but so far this has only been employed to a limited extent.

CY (Country) 'D' Codes. This is the country of the because the parent company, REMCO, is American; and any other comments, will be welcome. BUILD-X, though the parts were MERKUR, is Canadian because the name was used only in Canada.

-DATES- (Manufactured From---To) The Years are shown by their last two digits, spaced apart by 3 hyphens. They are followed by any necessary qualifying Codes ('E'), which for the start year supplant one or more of the hyphens. To avoid confusion, 20th century years through 1910 are in

**Matl (Material)** This shows (Codes 'F') the main materials The basic sort is alphabetical, with COMMENTS opposite from which systems are made; brassware or a few plastic parts are not noted.

> **THREAD** This column is the thread of the Nuts & Bolts. Common abbreviations are used rather than Codes, and examples are shown at 'G'.

**DP** (Diametral Pitch) The value given, to nearest integer, is for straight gears. The corresponding value of the Module is usually given under COMMENTS if it looks as if it

Parts (No of different parts in a system) Tools are counted, except special tools in DIY sets, but not literature. Where a system existed over a long period of time, all different parts are included in the entry, even if they were not all current together.

**Pitch (Hole pitch)** Given in mm, see Codes 'I'.

nearest part if a Strip wasn't available to be measured. dBS is the diameter of the bore of bosses, but is not given for 'eyelet' bosses unless the internal diameter is inappropriate to the size of the Axle. DAXL is the o/d of Axle Rods. All values are in mm these values, & after the hole Pitch, indicates that the total variation found was more than 0.1mm, and a mean value has been given. (dBS & DAXL were often quoted to 2 decibel places in earlier editions of this Database, but the variations often found, & the difficulty of measuring bores accurately, did not justify continuing such precision)

A 't' in the narrow column after DAXL indicates the use of Threaded Rods (or Bolts) as axles in the system, with, unless otherwise noted under COMMENTS, the same thread as the N&B. (In Part 2 the 't's' are on the right side of the TYPE column.)

MF M and F are the material and finish of the Nut and Bolt, as given by Codes 'F'.

**DHD** The diameter of bolt head in mm (or A/F for hexagonal heads).

**COMMENTS** Most of the abbreviations used are in Codes 'L.' Some others from Codes A-K also occur and their meaning

### MORE INFORMATION PLEASE

company that made the system itself or who had it made for There are many gaps in the Database & if you have any it, unless the name was changed for a specific market. Thus information on any of them, or spot any errors, please let me STEEL TEC was made in China but is listed under U.S.A. know. Equally suggestions for improvements in the layout, &

Codes 'A' (for narrow AS Aerospace columns after each entry)

means see note under COMMENTS on the righthand page. With more than one \* on a line, the notes are in order.

? some significant doubt

more than

approximately

estimated

known

m mean

probably

Screwed Rods or Bolts are used as axles (only after DAXL).

hole pitch, only for holes in wheels or discs, e.g. in some DIY systems. multiples of value shown, including half.

### Codes 'B' (Makers)

AK August Kirchhoff

**BM** British Metal

BR Braglia

BU Butcher

**CK** Construction (later Eitech)

EP Epoch Co.

FA FALT

FL Fleischmann

**GB** Gabriel Erector

GE Gédé

GT Gilbert Frector HU Hustler Toy Co.

HW Hans Wünsch

ID Ideal Frector

JP Jouets de Paris

KM Keim & Co.

KO Kosmos

KR Krause & Co.

MA Märklin

MC Meccano

MD Martinaud MF Merkur

Meccano-France MF

MK Markes & Co.

MR Mercator

MT Metalcraft

MU Meccano USA

PH Philips

PL Polylong

RI Richter SK Stockmann

TF Temsi

TR Trix

WA Walther

WK Wilhelm Kraus

WS Wisdom

## Codes 'C' (Types)

AR Certain Argentinean

**BD** Buildings

BX BAUFIX type

**CH Certain Chinese** CK as CONSTRUCTION

CR Road vehicles

DK as DINKY BUILDER

DY DIY type

ER ERECTOR type

ES Electrical/science

HA Certain Hungarian PR Professional type

LG Hole pitch >12.7mm

MA MÄRKLIN type

MB Matchbox & similar

MC MECCANO

ME MERKUR type

ML Very like Meccano

MM MC & MA features

MP Meccano principle but significant differences

NM Non-Meccano type

OO Not enough data

to classify

PH PHILIPS type

RT Mainly Rods/Tubes SM Hole pitch <12.7mm

ST STABIL type

TR as TRIX (inc MCX)

UK Certain UK

### Codes 'D' (Country)

AL Australia

AR Argentina

AS Austria

BE Belgium

BS Belarus

BU Bulgaria

BZ Brazil

CA Canada

CL Chile

CN China

CO Colombia

CZ Czechoslovkia or Czech Republic

DE Denmark

ES Estonia

FI Finland

FR France

**GE** Germany (GD if made in GDR)

GR Greece

HK Hong Kong

**HU Hungary** 

IC Iceland

IN India

IS Israel

IT Italy

KO Korea

JA Japan

ME Mexico

NE Netherlands NO Norway

NZ New Zealand

PO Poland RH Rhodesia RO Romania

RS Russia

SA South Africa

SD Sweden SL Slovenia

SP Spain

SW Switzerland

TA Taiwan

TY Turkey UK UK

**UN** Ukraine **UR** Uruquay

US USA

YU Yugoslavia VE Venezuela

## Codes 'E' (Dates)

Examples:

20a = after 1920

20b = before 1920 20c = circa 1920

20k = known in 1920

20l. 20m. 20e = late. mid, early 1920s

20s = 1920s

W1,2 = WW1,2

95+ = production in 1995& continuing at that time

as far as is known. p or ? after any of the above, as in Codes A.

## Codes 'F'

(Material/Finish)

a [spare]

b buff

c rubber

d see end \*

e grey

f [spare]

g green

h white

i [spare]

j cream

k black

I see end \*

m see end \*

n brown

o orange

p plastic

q card

r red

s silver

t stone u blue

v various colours w wood

x gold y yellow

z transparent

A Aluminium (Alloy) B Brass

C Copper D Dull plated E Grey metallic F Steel

G Green metallic

H White metallic

I Iridescent

J Brown metallic

K Black metallic

I Metal

M Chrome plated

N Nickel plated

O Orange metallic

P Bright plated

Q Bright Zinc plated R Red metallic

S Stainless steel

T Tin plated

U Blue metallic

V Various

W Cadmium X Gold metallic

Y Yellow metallic

Z Zinc (Alloy) \* I, m, d preceding colour means light, medium, or dark. Eg. Ir = light red.

## Codes 'G' (Threads)

Examples:

6BA

1/8W = 1/8" BSW

(as used in USA) M4= 4mm Ø coarse metric

5/32x40 = dia'' x tpi.a after any = approx. (for details of threads see

OSN 7/169, 8/203, 16/459,

b separate threaded boss

c collet fixing

d double-tapped

e eyelet

o not tapped

t tapped s single-tapped

# Codes 'I' (Hole Pitch)

Var variable.

A cheese with slight

C cheese D dome

F fillister

H hexagonal

K countersunk

M mush P pan

R round

S square T tapered cheese

V various

U truss W wing

Lower case letters are used for crosshead Bolts; and underlined lower case for Bolts with a recess for a key, with or without a screwdriver slot.

Details of heads are given

in OSN 20/585 & 21/618.

Codes 'K' (Nut size) If exact size unknown: L = large like MÄRKLIN S = small like

MECCANO #37c

## Codes

(Comments) AB Angle Bracket

abt about A/C Aircraft AG Angle Girder

al light alloy ald instead of alt alternate

brkt bracket(s) bs boss(es)

btm bottom c circa cat catalogue(s)

cf compare with CL centre line

cren crenellated ctr centre(s)

d, dia, Ø diameter DAS Double Angle Strip diff different

double tapped e early, earlier est estimated

exc excluding fl(gd) flange(d)(s) F/PI(ate) Flanged Plate

h hole(s) hd head(s) id inside diameter

fr from

ill illustrat(ed)(ion) inc including k known

man, man'l manual

od outside diameter pat patent perf perforated p, pl, plas plastic p-f push fit pl plate(s)

P/Pl(ate) Perf. Plate

PL parts list ply pulley(s) PN part no.

poss possible prob probably

pt part(s) qqf sometimes rd round(ed), road

SAS Single Angle Strip sf except sim similar

sl slight(ly) sltd slotted

sm small(er) sp hole pitch, spoke(s)

sp, spec special Spkt Sprocket

ss without s/t single tapped

sq square

std

'L'

standard str Strip(s) thrd thread(ed)(s)

Trun(s) Trunnion(s) typ typical var various

vert vertical w with

> up to

outs.

MECCANO PNs, sometimes preceded by 'M', are used to describe parts, so a M126 is a Trunnion & 126,a is a Trunnion & Flat Trunnion. These PNs are also used to describe modified parts, thus a 7h 126,a means a Trunnion & Flat Trunnion but with holes replacing the cut-

8-32 = diameter code - tpi

4x.8 = dia x pitch(mm)

# Codes 'H' (Bosses)

20/587, 21/618)

k key fixing

p push fit

# - no boss

Lg, Sh, value not known but >, < 12.7mm.

w after: in Wheel or Disc.

Codes 'J' (N&B)

B button

taper &/or rounding.

I, lg long(er), large(r) It light

mkd marked

ML MECCANO-like

whl wheel(s) W/P Wheel/Pulley plus